



EUROPEAN CENTRAL BANK

EUROSYSTEM

Occasional Paper Series

IRC Task Force on IMF and Global Financial
Governance Issues

Conditionality and design of IMF-supported programmes

No 235 / October 2019

Disclaimer: This paper should not be reported as representing the views of the European Central Bank (ECB). The views expressed are those of the authors and do not necessarily reflect those of the ECB.

Contents

Abstract	3
Non-technical summary	4
1 Introduction	7
2 IMF conditionality: the rationale	9
2.1 Solving b.o.p. problems and safeguarding IMF resources	9
2.2 Catalysing other sources of financing	10
2.3 Preventing moral hazard	12
2.4 Political economy considerations	12
Box 1 Alternatives and complements to standard conditionality	13
Box 2 IMF lending and perceived stigma	14
3 Implementing IMF conditionality: institutional aspects	15
3.1 The main elements of the conditionality process at the IMF	15
3.2 The Guidelines on Fund conditionality: key principles and conditionality reviews	16
3.3 Main issues for the 2018 Review of Conditionality	19
Box 3 The development of IMF conditionality: a historical overview	20
Box 4 Conditionality and programme design for using IMF and ESM resources: a comparison	21
4 The empirical evidence	24
4.1 A non-technical review of the empirical literature	24
4.2 IMF-supported programmes: main features and economic outcomes	28
Box 5 Measuring country ownership	40
Box 6 Measuring the success of GRA-funded programmes	41
Box 7 The Greek adjustment programmes and IMF conditionality	42
Box 8 Case Study Pakistan	44
5 Lessons, policy considerations and open issues	46

References	50
Annex 1 Tables and charts	58
Annex 2 Additional tables and charts	74
Annex 3 List of programmes: 2008-18	82
Annex 4 Data sources and variables	85
A Variables on programme conditionality	85
B Variables on macroeconomic outcomes	87
List of acronyms	88

Abstract

Conditionality is at the very heart of IMF lending and has been the subject of intense debates ever since the Fund's inception. Its success is of crucial importance not only for countries' chances of achieving the goals of IMF lending programmes, but also for the credibility of the Fund as a trusted adviser. This report provides information and a set of facts on the IMF arrangements approved after the global financial crisis, with a focus on ex post conditionality and on arrangements primarily financed through the General Resources Account (GRA). The analysis shows that between 2008 and 2018, the characteristics of IMF programmes evolved with the macroeconomic context; in particular, a tendency towards more structural conditionality and longer programme implementation horizons has emerged. In the aftermath of an IMF programme, all relevant macroeconomic variables tend to improve compared with the pre-programme period; in particular, external and fiscal positions improve considerably and growth typically rebounds, inflation declines and net private capital inflows stabilise or recover slightly. However, the improvement has generally fallen short of expectations, especially in terms of GDP growth and debt reduction. One area in which the effectiveness of IMF programmes has proven less than satisfactory is with serial borrowers, i.e. countries that fail to graduate from IMF financial assistance in due course. This highlights the importance of further analysing the factors behind the success of IMF programmes and points, inter alia, to the need to design and sequence the structural conditions attached to Fund loans more effectively.

Keywords: International Monetary Fund, IMF programmes, IMF conditionality

JEL codes: F3, F5

Non-technical summary

Conditionality is at the very heart of IMF lending and has been the subject of intense debates ever since the Fund's inception. Its success is of crucial importance not only for countries' chances of achieving the goals of IMF lending programmes, but also for the credibility of the Fund as a trusted adviser. The IMF periodically reviews whether conditionality – and the design of its programmes – are implemented in a way that contributes to the effectiveness of its lending activity. This report has been prepared by the IRC Task Force on IMF and Global Financial Governance Issues in parallel with the IMF's 2018 Review of Program Design and Conditionality (ROC); the latter was eventually discussed by the Fund's Executive Board only after this report had been finalised (IMF, 2019).

This report provides information and a set of facts on the IMF arrangements approved after the global financial crisis. It was intended as an input to help European authorities forge their positions on the key themes expected to be discussed in the 2018 ROC.

Standard (ex post) conditionality in IMF-supported programmes refers to the domestic policy adjustments required to use Fund resources. The IMF's Statutes (Articles of Agreement, AOA) attribute paramount importance to solving its members' balance of payments (b.o.p.) problems while protecting its own financial resources. Conditionality represents a crucial means to achieve these “dual” and mutually supporting objectives. Another important rationale for IMF conditionality relates to its presumed ability to give countries' policies its seal of approval and to catalyse other sources of financing. Containing the risk of moral hazard attached to IMF financing arrangements is an additional argument supporting Fund conditionality. Finally, several political economy considerations provide further insights into the working of IMF conditionality.

The empirical literature suggests that countries' external and fiscal balances generally improve as a result of IMF lending programmes, but outcomes in terms of growth and net capital inflows remain somewhat mixed. In this latter respect, country fundamentals do matter in determining the effects of IMF programmes, as shown by the fact that, after the global financial crisis, worsening country fundamentals entailed larger and longer programmes and more difficult structural challenges, and were thus associated with a higher probability of non-compliance and programme failure. Although the findings of this report confirm that countries' post-programme economic performance has tended to improve, the fact remains that IMF staff projections for growth and the public debt ratio formulated at programme approval turned out to be too optimistic in most cases. That said, it is worth pointing out that the empirical analysis of the effectiveness of IMF lending arrangements is hampered by measurement difficulties, lack of adequately granular data and methodological problems.

During the period reviewed, the characteristics of IMF programmes evolved with the macroeconomic context. In the last few years, a tendency towards more

structural conditionality and longer implementation horizons has emerged. The first years after the global financial crisis (2008-12) saw a much larger number of exceptional access (EXA) programmes, required by countries with large imbalances and with an urgent need to stabilise their economy, which translated into a higher weight of macro conditionality. However, going beyond the specific financing needs of this particular period, and against a background of increasing global interconnectedness and economic complexity, programmes approved after 2012 have reverted to more structural conditionality and implementation horizons have lengthened, as illustrated by the increase in the use of Extended Fund Facilities (EFFs) relative to standard Stand-By Arrangements (SBAs).

The comparison of conditionality and economic outcomes across specific categories of programmes (including EXA programmes, euro area programmes, SBAs versus EFFs, precautionary SBAs, programmes involving debt restructuring and “serial borrowing”) provides further insights. Such insights include:

- Fund resources committed to euro area programmes in the sample accounted for over 50% of total GRA committed resources in 2008-12; this fraction fell drastically after the completion of the arrangements for Greece, Ireland and Portugal. Euro area programmes were mostly of an EXA type and shared most of the characteristics of post-global financial crisis programmes, although they featured a larger share of financial sector conditions.
- More generally, during the period considered, EXA programmes entailed more conditions, relied to a larger extent on prior actions and showed somewhat lower levels of compliance, in comparison with normal access cases. In addition, the associated improvement in economic variables seemed to take longer (including with the presumed catalytic effect on private capital flows) than would be natural to expect in the case of countries affected by more severe imbalances and deteriorating market access.
- The number of programmes for countries undergoing some form of debt restructuring increased at the height of the global financial crisis and remained relevant in terms of Fund resources. The analysis suggests that these programmes helped countries to improve their fiscal position and restore growth. However, experience to date is limited to small and non-systemically relevant countries, and the conditions under which debt restructuring constitutes a critical factor for the success of IMF programmes is pending study.
- According to the preliminary analysis of “serial borrowing” programmes¹ presented in this report, those programmes followed by successor arrangements that were associated with persisting b.o.p. imbalances – and those successor arrangements themselves – perform rather poorly compared with the remaining programmes. This report sheds some light on the circumstances affecting the ultimate success of IMF arrangements.

¹ Namely strings of IMF programmes approved for the same countries over a relatively short period of time.

Turning to some of the issues that figure prominently in the 2018 ROC, this report highlights the following related lessons or questions.

First, the analytical strategy proposed by the IMF for measuring programme success appears to be a step in the right direction. This strategy rests on two pillars: one comprises the existence and characteristics of successor programmes (to determine the persistence of b.o.p. problems over time); the other comprises the changes in countries' vulnerability ratings before and after a programme.

Second, better design of structural conditionality is critically needed to ensure adequate prioritisation of policies and reduce uncertainty concerning the programme country's capacity to implement the measures effectively. Previous research by the IMF has also found that the depth of conditions is inversely related to their number – namely to parsimony. Nevertheless, the relative importance of parsimony versus the depth of conditionality has to be more convincingly analysed. This includes the need to adequately sequence structural reforms in order to achieve success and to form realistic expectations about the time necessary for them to work, as shown by the experience of euro area programme countries. On a more general note, more work remains to be done to make more realistic assumptions and reduce the repercussions of projection errors on policy design. The measurement of these critical concepts is the subject of ongoing work by the Fund.

Third, national ownership is obviously crucial for programme success but is especially difficult to measure. The relationship between the number of conditions and ownership, and how social acceptance could be enhanced by transparency, communication and clear distribution of adjustment costs is another link to be studied further. Tackling the perception of stigma through engagement and better communication is another important aspect.

Fourth, there are relevant open questions on the possibility of lengthening IMF arrangements, an issue that has surfaced in the discussions on the 2018 ROC. On the one hand, the length of programmes might be flexibly designed in order to allow more space for authorities' decisions and more time for policies to have an economic impact. On the other hand, longer EFF-funded programmes have several potential downsides, including reform fatigue, delaying needed adjustments or raising programme implementation risks. Experience in this regard is not encouraging, since so far very few four-year programmes have been concluded successfully.

Finally, on the quality of fiscal conditionality and the role of debt restructuring in IMF programmes. The empirical literature points to the fact that to be sustainable, fiscal adjustment has to go beyond short-term measures and address the fiscal vulnerabilities of programme countries on both the expenditure and the taxation sides. As to the role of debt restructuring – or of debt reprofiling – in ensuring the success of Fund programmes, caution is called for against adopting a general strategy on this issue; a case-by-case approach should continue to be preferred.

1 Introduction

Conditionality is at the very heart of IMF lending and has been the subject of intense debates ever since the Fund's inception. The Fund periodically reviews whether conditionality – and, more generally, the design of its programmes – are implemented in a way that contributes to the effectiveness of its lending activity. When preparing this report, the last completed Review of Conditionality and the Design of Fund-Supported Programs (ROC) dated back to 2011 and the Fund's staff was engaged in a new review (the 2018 ROC). The 2018 ROC was discussed by the Executive Directors of the IMF after this report was finalised on 3 May 2019.

The principal objective of the IRC Task Force was to inform European authorities about the key issues involved in the 2018 ROC, and provide them with the necessary background to substantiate their positions in the coming debate. Within this scope, the report aims to provide information and evidence to help assess the effectiveness of Fund-supported programmes and conditionality in the post-2008 period, without attempting to reach or pre-empt the conclusions of the Fund's review. The report acknowledges the relevance of the IMF's policies on conditionality and design of Fund-supported programmes for its member countries around the globe. As far as possible, it takes a European perspective. In particular, it provides a brief comparison between the way the IMF designs conditionality and how conditionality has been applied in European funded programmes, and places particular focus on IMF programmes with European countries in the empirical section. In addition, it provides a brief overview in Box 7 of IMF conditionality in the Greek adjustment programmes.

The IMF's ROC normally covers standard (ex post) conditionality² and programme design. Conditionality is the set of policy measures under the control of national authorities which are required by the Fund as a condition for the use of its own resources, with the objective of enabling the borrowing country to resolve its b.o.p. difficulties while repaying the Fund in a timely manner. The design of IMF programmes is strictly related to conditionality but is a wider concept. Broadly speaking, programme design has to do with the way in which the intended domestic policy adjustment is combined with the provision of both official and private financing – including the possibility of reprofiling or debt restructuring if needed. Thus, it includes a variety of additional aspects such as assessing the country's external financing needs, analysing debt sustainability and related risks, and choosing the relevant lending facility, the amount of financing and the schedule of disbursements (phasing). Moreover, approval of access to Fund resources requires that the Fund be satisfied that the member's programme is consistent with the Fund's provisions and policies and that it will be carried out, and in particular that the member is sufficiently committed to implementing the programme.

² In IMF jargon, this type of conditionality is also called "upper credit tranche" conditionality because all Fund members can draw unconditionally on their own credit tranche positions at the IMF.

This report adopts a narrower focus than in the Fund's ROC. In particular, it considers only arrangements financed through its General Resources Account (GRA) (i.e. those agreed to address countries' b.o.p needs as mandated by the Articles of Agreement) and not concessional programmes financed by the Poverty Reduction and Growth Facility (PRGT), which have different purposes and financial terms. "Blended" arrangements, based on a mix of GRA and PRGT resources, are taken into consideration whenever the GRA component is at least 50% of total funding. In line with the present IMF Review, this report refers only to programmes with "ex post" conditionality, including "precautionary" SBAs (whereby countries make a non-binding commitment not to draw Fund money). IMF arrangements which are granted to countries on the basis of prequalification criteria ("ex ante" conditionality) will not be considered in this report.³

IMF conditionality and programme design are very important to the Fund's shareholders and to central banks, which usually have a direct financial stake in this institution.⁴ Members are strongly interested in reducing the likelihood or mitigating the effects of possible crises, including by ensuring that countries with b.o.p problems approach the IMF in a timely manner and adjust their own policies to solve these problems. Members also have an obvious interest in ensuring that IMF resources are used in a temporary fashion and that all borrowing countries are in a position to repay the Fund. When designing programmes and defining conditionality, a careful balance needs to be found to discourage countries from approaching the Fund too late while always requesting domestic policy adjustments that can effectively address their underlying imbalances.

The report is organised into five main sections. After this introduction, Section 2 describes the rationale behind the use of conditionality in IMF programmes, mainly related to the need to ensure that countries under programmes solve their b.o.p. problems and that IMF resources are safeguarded. Section 3 provides an overview of the Fund's institutional framework for conditionality, including a brief description of its historical development and a comparison with the conditionality attached to ESM/EFSF resources. Section 4 deals with the empirical part: starting from the existing empirical literature, the section highlights the findings of an analysis of available data and a few case studies to set the frame for the evaluation of the Fund's review. Section 5 concludes with key findings and policy recommendations.

³ Arrangements belonging to this category are those financed by the Flexible Credit Line (FCL) and the Precautionary Liquidity Line (PLL).

⁴ The institutional role and competencies of central banks vis-à-vis the IMF vary from country to country. In a good number of cases, the central bank is entrusted with representing the country at the Fund. More generally, the IMF-related responsibilities of central banks include holding the country's assets and liabilities vis-à-vis the IMF, with quotas and special drawing rights (SDR) holdings recorded on their balance sheet.

2 IMF conditionality: the rationale

Conditionality in IMF-supported programmes refers to the domestic policy adjustment required to use Fund resources.

The lending function is instrumental in achieving the Fund's purposes, as stated in its Articles of Agreement: "to give confidence to members by making the general resources of the Fund temporarily available to them under adequate safeguards, thus providing them with the opportunity to correct maladjustments in their b.o.p. without resorting to measures destructive of national or international prosperity" (Article I(v)). Conditionality is intended to ensure that Fund resources are provided to members to assist them in resolving their b.o.p. problems in a manner that is consistent with the Fund's Articles and that establishes adequate safeguards for the temporary use of the Fund's resources (IMF Guidelines on Conditionality, para. 1). In this sense, acceptance of conditionality can be seen as a kind of collateral provided by the country receiving financial assistance from the Fund, including in the light of uniform lending rates charged to countries independently of their risk.

However, IMF conditionality is more than just collateral for IMF lending. The literature has identified a number of further arguments that provide a rationale for IMF conditionality.

The main argument refers to its presumed catalytic effect on private capital flows. From another perspective, conditionality may also be seen as a tool to prevent or contain moral hazard that could otherwise arise as a result of "easy access" to external financial assistance. On the other hand, conditionality also has potential downsides, such as the risk that countries may perceive a stigma and avoid or delay negotiating their economic policies with the Fund in exchange for financing. Stigma and the possibility of finding alternative or complementary instruments to conditionality in Fund programmes are explored in Boxes 1 and 2.

2.1 Solving b.o.p. problems and safeguarding IMF resources

The Fund's Articles attribute paramount importance to solving its members' b.o.p. problems while protecting its own financial resources.

Conditionality is a crucial means of achieving these "dual" and mutually supporting objectives.⁵ In fact, the successful completion of Fund programmes increases the chances that its resources will be used only temporarily and that the IMF will be repaid as scheduled – a key objective for a "credit cooperative" such as the IMF, whose resources accrue mainly from the quota subscriptions of its members, and a key element in ensuring that member countries can treat their IMF positions as international reserves. In this way, conditionality ensures responsible lending while reassuring the requesting

⁵ The legal basis for Fund conditionality is provided by Article V, Section 3(a), which is often read in conjunction with Article I (v). Article V requires the Fund to adopt policies that will (i) assist members to resolve their BOP problems in a manner consistent with the provisions of the Articles of Agreement, and (ii) establish adequate safeguards for the temporary use of the Fund's general resources. Consistent with this requirement, conditionality is designed to ensure that the member takes the necessary steps to resolve its BOP problem within a time frame that will enable it to repay the Fund.

member that it has continued access to IMF financing if it complies with conditions at the same time (IMF, 2005).⁶

To be sure, over the years the IMF has developed a number of additional policies and procedures to protect its resources and contain the related credit risk, as mandated by its AOA. Tools designed to address the borrowers' willingness or ability to repay include: the exceptional access framework, compliance with financing assurances, the charges and surcharges structure, the post-programme monitoring exercise, the lending into arrears policy, the build-up of precautionary balances, safeguards assessments, and the remedial measures applied to members' overdue financial obligations.⁷

The Fund also enjoys a de facto "preferred creditor status" (PCS), which is recognised by the international financial community on a voluntary and informal basis in consideration of the general interest functions performed by the IMF (Martha, 1990) and the expectation that an IMF engagement in a country will strengthen its prospects of overcoming its b.o.p. problems – and thereby becoming sufficiently strong again to repay other creditors as well. As a result of this status, borrowers that fail to repay the Fund would incur additional costs (e.g. through longer periods of exclusion from key financial markets). The IMF would also obtain additional protection against possible legal attachments over the repayment flows of its loans (for example, via political pressure on the relevant courts). As is evident, however, the protection offered by this PCS does not relieve the Fund of the need to manage its resources in a prudent and effective manner; otherwise, the reputational costs for the IMF would lessen the support it receives from the international financial community.

2.2 Catalysing other sources of financing

Another important rationale for IMF conditionality relates to its presumed ability to support the propensity of official and private investors to lend to programme countries.⁸ By acting as a "delegate monitor" (Tirole, 2002) that gives the country's policies its seal of approval, IMF conditionality assures private and official creditors that debtor countries will adopt policies consistent with the objective of regaining external viability and debt sustainability. The signalling/catalytic function is particularly attractive from a policy perspective, as it works in the very best interest of both the Fund and its borrowers. On the one hand, the IMF can economise the use of its financial resources. On the other hand, borrowers can either adjust their current account balance at a slower pace, if they are able to maintain access to private

⁶ Beyond conditionality, borrowing members that already have access to private capital markets do have strong incentives to repay the Fund in a timely manner, with a view to preserving their own creditworthiness (Buire, 2003).

⁷ Up to a possible compulsory withdrawal from the Fund for protracted cases of non-cooperation with the IMF, as stated in Article XXVI, Section 2 (IMF, 2000, Box 3).

⁸ The notion of catalytic finance took hold in the 1980s in the context of increased financial liberalisation and capital mobility, as it became clear that the size of the overall financing gap of IMF programme countries was conditional on the credibility of the economic adjustment.

capital markets during the life of the programme, or regain access to these markets faster than would be the case in the absence of signalling/catalytic effects.⁹

There are at least two ways in which Fund programmes can play a signalling or catalytic role. First, the mere fact that the debtor country is redirecting its policies towards a more appropriate regime should entice private capital inflows.¹⁰ Second, IMF conditionality is a “contract-like” multi-period commitment mechanism that helps address information asymmetries between borrowers and creditors and the related potential for time inconsistency in the behaviour of national authorities. In both cases, IMF conditionality can be seen as a signalling device that helps investors to screen and monitor their debtors.

However, the empirical evidence about catalytic effects is mixed (see Section 4.1). Several reasons have been identified to explain why these effects may not materialise in practice: (i) conditionality usually has a contractionary effect on the economy in the short run; (ii) it may sometimes point to country problems that were not originally anticipated by the market (see Box 2, on stigma); (iii) the presence of catalytic effects also depends on the actual design of specific adjustment programmes; if private creditors believe that the probability of default remains high because of persisting bad fundamentals, they will withdraw their investments despite the IMF’s financial support (Corsetti et al., 2006); and (iv) when IMF financing covers a large part of the funding needs of a distressed country, private investors may anticipate that, for any given probability of default/restructuring, their repayment prospects will be worsened by the Fund’s preferred creditor status; as a result, they will be hesitant to maintain their exposure and this will lead to an immediate deterioration in market access (Modi and Saravia, 2003).

Correctly assessing the Fund’s signalling/catalytic effect is important in order to improve the design and management of its programmes. Fund arrangements are designed with specific assumptions about how the relevant economic variables will behave in the future. If additional private and official financing is assumed to accrue as a result of the programme but it fails to materialise, meeting the other benchmarks will be more difficult, thereby prompting further adjustment.

However, improving the signalling/catalytic role of conditionality is not a straightforward task. On the one hand, it would seem that to act as a multi-period commitment mechanism, conditionality would need to be predetermined without granting policy waivers too frequently (Section 3.1). On the other hand, the need to adjust programme parameters to evolving circumstances is evident. Indeed, the adaptability of conditionality, combined with strong national ownership and careful communication strategies, are of the essence.

⁹ Not surprisingly, continuing capital market access (or its prompt restoration) represents one of the four substantive criteria for justifying IMF loans beyond normal limits, i.e. its “exceptional access policy”.

¹⁰ Moreover, the function of liquidity provision provided by the IMF also allows countries to push through reforms that in the absence of financial support would be too costly to implement (Morris and Shin, 2006).

2.3 Preventing moral hazard

Another argument supporting Fund conditionality is the need to contain the risk of moral hazard attached to its financing arrangements. The literature identifies two types of moral hazard related to IMF lending: (i) debtor moral hazard, which refers to the potential behaviour of governments requesting Fund support to simply avoid or delay reforms needed to restore economic viability; and (ii) creditor moral hazard, which refers to the potential behaviour of creditors who would continue to lend to a country despite the lack of convincing policy reforms as they expect the country to (continue to) have access to IMF resources (Dreher, 2006). Some authors even suggest that moral hazard can arise with respect to third parties: if a crisis generated in one member country has negative spillovers on other countries, the Fund's intervention may reduce the incentives for prevention and lead to collective inaction (Jeanne et al., 2008).

Making IMF funding conditional on specific and agreed policy actions contributes to reducing the risk of moral hazard. However, the fact that programme conditions are negotiated by the finance ministry and central bank representatives while implementation may be partly in the hands of other stakeholders (such as other public agencies, the private sector, trade unions or non-governmental organisations) may weaken this effect in borrowing countries.¹¹

2.4 Political economy considerations

The academic literature has also debated conditionality based on political economy considerations. According to one of these views, IMF programmes and their conditionality represent a mechanism by which the Fund exerts its financial leverage to induce the authorities to implement reforms that they would not implement otherwise. This argument is presented sometimes as “paternalism”, whereby conditionality is applied to ensure that the country implements what the Fund believes to be the most appropriate policy actions. In any case, the authorities' readiness to accept such reforms may depend on the political situation. First, these conditions can be perceived as too intrusive, infringing on the country's sovereignty. Second, as stressed by the principal-agent theory, an agent will do a better job for the principal if the two parties' objectives are closely aligned. In the context of conditionality, the agents' ownership of the policy reforms may be lower if they are imposed by the principal, reducing the effectiveness of such conditionality in inducing economic reform.

On the other hand, another argument presented in the literature is that country authorities could use the IMF as a scapegoat for unpopular reforms. In other terms, conditionality would operate as a means to strengthen the reform policy agenda of policymakers in cases where domestic opposition to proposed reforms is particularly high or the political cost of implementing such reforms is considered excessive.

¹¹ This means that the IMF faces a “moral hazard in teams” (Holmström, 1982).

Box 1

Alternatives and complements to standard conditionality

Conditionality is one of the most contentious issues in the relationship between the Fund and borrowing countries: it encroaches on countries' sovereignty, it may exacerbate the perception of IMF stigma (Box 2) and it is not always effective in inducing economic reform or restoring confidence. However, conditionality has become an integral part of programme design and there is a broad consensus that financing is conditional on policy commitments.

Ex ante conditionality is a specific case in this regard. It allows the Fund to assist countries that meet certain qualification criteria, essentially strong fundamentals and policies, without requesting specific policy adjustments. This approach has the advantage of reducing the perception of intrusiveness of ex post conditionality, but results in a much narrower set of potential borrowers unless the qualification criteria were substantially lessened. For this reason, this type of conditionality will never be an alternative to standard conditionality. Ex ante conditionality has made its way through the introduction of the Flexible Credit Line (FCL; 2009) and the Precautionary Liquidity Line (PLL; 2010).

This box briefly discusses a few approaches that have been put forward in the academic literature to replace or supplement regular conditionality, additional to the policies and procedures mentioned in the main text.

As an alternative to detailed ex post conditionality, Williamson (2000) suggested linking a liquidity facility intended to prevent contagion to countries' adherence to certain codes of best practice. Examples of this proposal (not explicitly considered by that author) could be to link Fund lending to adherence to the voluntary Reports on the Observance of Standards and Codes (ROSCs) or, as in Kenen (2000), to the successful completion of countries' Financial Sector Assessment Programmes.

Use of collateral. Feldstein (2002) and Meltzer (1998) proposed replacing conditional lending with lending against collateral (e.g. financial assets, tax revenues, oil revenues, etc.). The AOA envisage the pledge of collateral – in addition to conditionality – in cases of high risk with waivers of conditions involved.¹² This option protects IMF resources but does not ensure that the funds are used to carry out the necessary adjustments and reforms. If assets were sufficiently liquid, the country might in fact sell them or draw on alternative sources before requesting IMF financing (Goldstein, 2000).

Self-imposed conditionality. Eldar (2005) has proposed simplifying the drafting of ex post conditionality (which usually entails negotiations between the Fund and the authorities) by letting the country authorities devise their own preferred policy adjustment; the IMF would then assess whether these measures meet a certain standard of “reasonableness” before approving the programme and its subsequent reviews. This proposal would preserve countries' sovereignty, secure their policy commitment (i.e. their “ownership”) and yield a more transparent process. However, the reasonableness criterion is vague and there is no guarantee that its use would lead to a greater number of less controversial processes.

¹² Cf. Article V Section 4 on the pledge of collateral security as a condition for a waiver of conditions governing the use of the Fund's general resources set out in Article V Section 3(b)(iii) and (iv) of the AOA.

With the sole exception of ex ante conditionality based on qualification criteria, none of these proposals have been endorsed by the Fund's Executive Board, as they do not satisfy all the statutory and institutional requirements for accessing Fund resources. Within the Fund, there is a broad consensus on the need for IMF financing to be conditional on a series of policy commitments.

Box 2

IMF lending and perceived stigma

One of the reasons why members with b.o.p. difficulties may hesitate to approach the IMF is the stigma they associate with Fund-supported programmes. More precisely, IMF stigma refers to the discredit or taint that some countries feel they will attract by seeking IMF assistance. Countries fear that this taint will bring a backlash, either from the electorate (political stigma) or from financial markets (financial market or economic stigma) (Andone and Scheubel, 2019).

The perception of stigma can interfere with the Fund's effectiveness in several ways. First, it may deter members from approaching the Fund until a crisis is well underway. Any hesitation in turning to the IMF in the event of crisis impairs its role as part of the global financial safety net. Second, perceived stigma is likely to be inversely related to national ownership, i.e. countries' willingness and ability to implement certain policy adjustment measures. Third, stigma also makes it harder for the Fund to play a role in crisis prevention. This being said, it must be borne in mind that stigma is a matter of perception. Not all countries perceive discredit in being supported by the Fund; on the contrary, as noted in Section 2.4, national authorities may also proactively use the Fund as a means to contain the political costs of domestic reforms.

Several factors can drive the perception of stigma. Stigma might be perceived by countries that attach considerable importance to safeguarding their sovereignty and do not want to be seen as having to ask others for financing or do not want to accept conditions that they feel are imposed by others. Harsh or even excessive conditionality has also been cited as one reason for the perception of stigma. During the Financial Crises of 1997-1998, many Asian countries felt strongly that they were victims of wrong IMF prescriptions, and policymakers also felt politically humiliated by IMF leaders and officials (Ito, 2012). In the case of the crisis in Greece, the economic stipulations by the lending institutions (including the IMF) were at times considered offensive by Greece's authorities and population (Box 7). The perception of stigma can also be linked to the perceived lack of evenhandedness in surveillance and lending.

Over the years, the IMF has tried a number of ways to address concerns related to perceived stigma and lack of ownership. The proposed remedial measures included: limiting programme-related conditions to the strict minimum needed to achieve the programme's goals; eliminating structural performance criteria and reliance on review-based conditionality for structural reforms; increasing flexibility in programme design and monitoring (IMF, 2012, p. 15); clarifying that members are "primarily responsible" for the selection, design and implementation of their economic and financial policies; and introducing conditionality that protects the most vulnerable sections of the population (IMF, 2012, p. 16). Section 3.2 mentions other connected reforms. Stigma perceptions have also been addressed by the introduction of new precautionary lending tools requiring no or very limited ex post conditionality (i.e. the FCL and the PLL).

3 Implementing IMF conditionality: institutional aspects

As noted earlier, conditionality is not explicitly mentioned in the Fund's Articles of Agreement (AOA) but is a key element of the pursuit of its objectives. The specific policies for the use of IMF resources have been developed over the years by its Executive Board, by approving formal Guidelines and Guidance Notes to the Staff. Periodic reviews, such as the 2018 ROC, are an essential part of the process of keeping conditionality aligned with those objectives. The Independent Evaluation Office (IEO 2007 and 2018) has also contributed to shaping the institutional view of conditionality through several reports.

3.1 The main elements of the conditionality process at the IMF

The implementation of IMF conditionality is best described as a process that unfolds over time. It includes policies and procedures designed to link the sequence of disbursements of Fund money to demonstrable policy actions by the borrowing members, while adjusting for changes in the latter's economic and financial conditions. This process takes account, on the one hand, of a number of predefined categories of domestic policy commitments which must be fulfilled and, on the other hand, of a series of formal Board deliberations on activating a programme and approving the subsequent reviews, including on granting certain "waivers" for non-observance of those commitments (i.e. exemptions from implementing some of the agreed policy measures).

Domestic policy commitments in Fund-supported programmes may take different forms:

Prior actions – When deciding whether or not to approve an arrangement, complete a review or grant a waiver for non-observance of a performance criterion, the Fund often requires that the member first take certain measures as a prior condition to the Board's decision. These prior actions are generally structural measures whose implementation is so important that the IMF is not prepared to release any further funds until they are taken. Prior actions are relied upon particularly where the member's track record of performance has not been good and the Fund doubts the member's commitment to its programme.

Performance criteria – These include quantitative performance criteria, consisting of quantitative targets for key macroeconomic variables that are expected to be reached over the life of the member's programme.¹³ Until 2009, there were also structural performance criteria, including structural measures whose implementation was

¹³ Common examples are the level of net international reserves or the size of the budget deficit.

regarded as crucial to the success of the programme.¹⁴ In order to draw from the Fund, IMF members with a programme must demonstrate that the relevant performance criteria have been met and, on this basis, that the programme is “on track”.¹⁵

Indicative targets – Variables may be established as indicative targets for the part of an arrangement for which they cannot be established as performance criteria because of substantial uncertainty about economic trends. As uncertainty is reduced, these targets will normally be established as performance criteria, with appropriate modifications as necessary. Indicative targets may also be established in addition to performance criteria as quantitative indicators to assess the member’s progress in meeting the objectives of a programme in the context of a programme review.

Structural benchmarks – A measure may be established as a structural benchmark where it cannot be specified in terms that may be objectively monitored. Structural benchmarks are intended to serve as clear markers in the assessment of progress in the implementation of critical structural reforms in the context of a programme review. Failure to implement these benchmarks, however, does not automatically lead to the interruption of disbursements under an arrangement should no waiver be granted.

Programme reviews by the Executive Board are a key defining moment in Fund conditionality. The borrowing member will not be able to receive further disbursements until the review is completed, which means that the Board is satisfied that the member’s programme is on track. In reaching this assessment, the Board will review both past performance and potential implementation going forward. Board reviews give the Fund an important opportunity to establish conditions for drawing funds in future if they were not established when the arrangement was approved. They also allow the Fund to modify the arrangement over time as the programme is implemented.

3.2 The Guidelines on Fund conditionality: key principles and conditionality reviews

The current pillars of Fund conditionality were shaped by Guidelines approved by the Board in 2002 (IMF, 2002). For a brief discussion on how these Guidelines have evolved since the Fund’s inception, see Box 3 at the end of this section. See Box 4 for a comparison between the IMF’s general framework for conditionality and programme design, and the rules and processes related to the use of ESM resources.

¹⁴ These latter conditions often involve legislative reforms such as the enactment of a new banking or bankruptcy law.

¹⁵ The Executive Board may grant a waiver for non-observance of some conditions and permit the disbursements to be made only if it is satisfied that, notwithstanding this non-observance, the programme can still be successfully implemented. In practice, the waiver will normally be granted if (i) the non-observance is minor and essentially self-correcting, or (ii) in cases where the non-observance is more serious, the member is prepared to take additional corrective measures to bring the programme back on track.

The 2002 Guidelines contain five general principles on conditionality, supplemented by operational instructions to staff. These principles are the following:

Ownership – In responding to members' requests to use Fund resources and in setting programme-related conditions, the Fund is guided by the principle that “the member has primary responsibility for the selection, design, and implementation of its economic and financial policies”. The IMF defines national ownership as “a willing assumption of responsibility for a program of policies, by country officials who have the responsibility to formulate and carry out those policies, based on an understanding that the program is achievable and is in the country’s best interest” (IMF, 2002, p. 8). Thus, this principle postulates both the authorities’ willingness and ability to “do the right things”, i.e. to implement the policies agreed with the IMF. As is evident, the mere willingness of country officials to implement these policies will have no effect if, for example, a new law agreed as part of the programme cannot actually be passed by national or local authorities.

Parsimony – “program-related conditions should be limited to the minimum necessary to achieve the goals of the program or to monitor its implementation; the choice of conditions should be clearly focused on those goals.”

Tailoring – “the causes of balance of payments difficulties and the emphasis to be given to various program goals may differ among members. In addition, economic policy understandings should be consistent with the member’s capacity to implement policies... the specification and timing of policy adjustments and the appropriate mix of financing and adjustment will reflect the member’s circumstances and the provisions of the facility under which the Fund’s financing is being provided.”

Coordination with other multilateral institutions – “the Fund’s policy advice, work on program design, and conditionality should strive to be consistent with that of other institutions and, whenever possible, should be integrated within a coherent country-led framework. Responsibility and accountability for all conditions attached to the use of Fund resources reside with the Fund.”

Clarity – “program-related conditions should be transparently distinguished from other elements of the authorities’ program both in staff reports and in the member’s program documents. In particular, although program documents, if the authorities so wish, may set out the authorities’ broad policy agenda for national or international audiences, such documents as well as staff reports should clearly specify the parts of the agenda that constitute understandings on which continued access to Fund resources depends.”

The first three principles are particularly relevant and tend to reinforce one another. Ownership is arguably the key ingredient in the effective implementation of the required policy adjustment, which in turn may pave the way towards achieving the ultimate objectives of Fund-supported programmes (i.e. solving b.o.p. problems and putting members in a viable external position in the medium term, without resorting to

measures destructive of national or international prosperity).¹⁶ Parsimony and tailoring are also fundamental principles of Fund conditionality, as they help underpin country ownership.¹⁷

These principles have remained unchallenged since 2002. Based on them, IMF programmes have been expected to give members adequate policy space and be composed of conditions judged to be of critical importance or necessary for the implementation of specific provisions of the Articles or policies adopted under them.

Since 2002, several reviews and reports have assessed and monitored the most important aspects of conditionality. Following the recommendations by the IEO (2007), structural performance criteria were abolished in 2009 and replaced by review-based assessments of progress in the implementation of structural conditions, in order to enhance the flexibility of the conditionality framework and to reduce the stigma associated with them. The 2011 Review of Conditionality concluded that conditionality was sufficiently flexible and programmes had been properly adapted to changing domestic conditions. However, programme ownership and macroeconomic outcomes were considered to be major pending issues (and will also be at the heart of the current review). Serious emerging challenges were identified in connection with the euro area crisis (the size of debt burdens, the systemic nature of crisis and the cooperation with other institutions in a currency union). Macro-social issues started attracting increased attention as well. In its updated report on structural conditionality, covering the 2003-17, the IEO (2018) considered the materialisation of some streamlining to be an effective achievement but stressed the need to continue addressing the perception of stigma and lack of ownership. For instance, it found limited evidence that eliminating structural performance criteria had served this objective.

Over the years, national ownership of programme conditionality has become critical in the relationship between the Fund and its borrowers. Conditionality was initially designed and implemented as a request from the Fund in return for financial assistance in order to safeguard IMF resources. This narrowly contractual approach evolved in the 1990s-2000s when the lack of empowerment of national authorities was identified as a major reason for programme failure. Since the 2002 Guidelines, the relationship has relied on greater ownership; it has focused on arriving at mutually agreed conditions through policy dialogue, ideally led by the member. However, this gives rise to some challenges as ownership is dynamic and not directly observable, and it relates to many potential owners (Boughton and Mourmouras, 2002). What is at stake then, is how to build a relationship of trust with authorities, and how to overcome obstacles to achievability such as weak administrative capacity. The recent experience of the Greek programme

¹⁶ The members' "primary responsibility" over their own policies does not mean that they should be solely responsible for the design and implementation of programme conditionality. In fact, the IMF has a legal obligation to ensure that these policies and the related programmes comply with its ultimate goals as dictated by the Articles. For this reason, conditionality is always negotiated bilaterally with the authorities and represents a mutually acceptable understanding of programme goals, the political economy framework, the country's economic and financial priorities and its capacity to implement reforms within the specified time horizon (IMF, 2012b, p. 31). Thus, the IMF remains fully responsible for establishing and monitoring all policy conditions.

¹⁷ For a further discussion on measurement issues related to country ownership, see Box 5 in Section 4.2.

demonstrated the persistent difficulties in ensuring broader and effective national ownership irrespective of the borrowing country's level of development.

3.3 Main issues for the 2018 Review of Conditionality

The preliminary findings of the 2018 ROC were discussed by the Executive Board in July 2018 and February 2019. Those early discussions provided a preview of the main issues considered in that exercise, particularly: (a) assessing the effectiveness of Fund-supported programmes and measuring their success; (b) analysing the growth and debt outcomes in programme countries, which were found to be generally disappointing compared with staff projections despite a high degree of programme implementation. In the staff's view, this underperformance could be attributed not only to domestic factors but also to the unfavourable external environment in the aftermath of the global financial crisis. In this context, several aspects needed to be reviewed: the quality of fiscal adjustment, the nature of structural conditionality (which could be excessively tilted towards areas where the Fund has greater expertise) and the length of the Fund's programmes (which could be too short given the increasingly structural nature of conditionality). The Fund also planned to gauge evenhandedness in designing programmes and the impact of sovereign debt operations for programme countries.

From an EU perspective, the IRC Task Force considered that consistency with the recently approved decision on programme design in currency unions was one of the aspects to monitor in the context of the Fund's Review of Conditionality, even though this issue would not be prominent in the review.

Other issues were related to the need to ensure well-designed conditionality that takes due account of the need for structural reform, which is especially important for countries in the Economic and Monetary Union. Ownership could be better served by promoting social acceptance of the programmes through an appropriate communication strategy and measures to ensure fair distribution of the adjustment costs, rather than by a mere reduction in the number of conditions. The prioritisation and sequencing of the measures, taking into account the complementarity of reforms, is especially important for ensuring success, which may come about more slowly than with more traditional fiscal measures. In fact, IMF conditionality seems to be too focused on fiscal issues. Successor programmes might be needed if the initial programmes have failed to reduce countries' imbalances, but consideration must be given to how these would interact with politics and ownership in the country and comply with IMF policies.

The ROC's focus on the success of IMF programmes was regarded as essential. Appropriate IMF conditionality is particularly important for ensuring the success of IMF programmes in terms of temporary use of Fund resources and timely repayments to the Fund. Lack of success of IMF programmes could compromise the necessary reserve asset characteristics of central bank claims vis-à-vis the IMF,

which is also particularly relevant for central banks in the European System of Central Banks (ESCB).¹⁸

All such themes are considered in the remaining parts of this report, in the light of the findings of the empirical literature (Section 4.1) and the preliminary indications provided by our own additional investigations (Section 4.2), which aim to set the backdrop for the discussions on the 2018 ROC.

Box 3

The development of IMF conditionality: a historical overview

The original Articles of Agreement (AOA) contained no explicit statement that the Fund had to adopt policies on the use of its resources (Gold, 1979). In the very early years of the Fund, some controversies arose about the “automaticity” of its resources, i.e. the Fund’s ability to challenge the requests of its members. The UK and virtually all other countries did not want to place limitations on a member’s right to draw, while the US – in fact the only potential creditor at that time – wanted to protect IMF resources from misuse. The UK in particular, which according to Oliver (1985) regarded national economic sovereignty as an absolute priority, wished to place strict limitations on the Fund’s responsibilities vis-à-vis the economic policies of its members (Dell, 1981). In 1947, the first Managing Director further clarified the limitations on the purposes for which the resources may be used in a letter and a memorandum to members (Gutt, 1947).

In 1952, a major step to formulate policies on the use of Fund resources was taken. The IMF established the credit tranche policy and introduced Stand-By Arrangements (SBAs). Access to Fund resources was ensured insofar as “members had made a demonstrable contribution to the Fund’s activities”, essentially distinguishing the automatic use of the “gold tranche” (25% of a member’s quota that was fully paid in gold; the current “first credit tranche” since the second amendment of the AOA in 1978;) from what later became known as the “upper credit tranches” (any use of IMF credit above 25% of quota). With the establishment of the SBA, which enabled the Fund to decide on each occasion whether it would make its resources available in support of a member’s economic and financial programme, policies on the use of Fund resources became policies of the Fund by which the standards of the credit tranche policy were applied (Gold, 1979). In 1955, the general principle became that “the larger the drawing in relation to a member’s quota, the stronger the justification required of the member” (Horsefield, 1969, Vol. 2, p. 404).

The Fund’s first conditionality guidelines in 1968 were already a compromise between even-handedness and flexibility. At that time, the Board stressed the need to allow for flexible yet uniform treatment of all members (Gutián, 1981) and adopted a first set of rules on conditionality after the particular case of the United Kingdom’s exceptional SBA, lacking any quantitative performance clause, fuelled the debate on evenhandedness in preceding years. In addition, the AOA were amended for the first time in 1969, authorising the establishment of special drawing rights (SDRs) and formalising the Fund’s policies on the use of its resources.

¹⁸ Council Regulation (EC) No 3603/93 relating to the application of the monetary financing prohibition (Article 123 AEUV) allows ESCB central banks to finance obligations falling upon the public sector vis-a-vis the IMF on behalf of their home countries (Article 7), on the assumption that this financing “results in foreign claims which have all the characteristics of reserve assets” (preamble, paragraph 14). According to IMF definitions of reserve assets (Balance of Payments Manual, Sixth Edition, Chapter 6, Section F.I.a.e), this implies that such claims need to be “readily available”, i.e. highly liquid and of low risk.

Guidelines were extended and adapted in 1979 to emphasise flexibility as a result of strong criticism from developing countries that conditions had been insensitive to the political and social context of borrowing states. Conditionality started by focusing on fiscal and monetary conditions. The rapidly changing economic and political context of the 1970s – with the collapse of the fixed exchange rate system and a major oil crisis – led the IMF to expand the scope of its conditionality, including conditions on exchange rate policy, levels of external debt and trade liberalisation, using alternative bases which were not provided for in the Guidelines such as Letters of Intent (LOI) and compulsory preconditions on fiscal aspects (Best, 2012). These changes accompanied the creation of the Extended Fund Facility (EFF) in 1974 which was supposed to provide longer-term assistance than the SBA to support structural reforms (see below) needed to address b.o.p. difficulties.

The biggest transformation came in the 1980s with the development of “structural conditionality”. As described by Babb and Buira (2005), lending arrangements began to require “structural” reforms that were no longer temporary, but oriented towards deep changes that were much more difficult to reverse, such as privatisation and trade liberalisation. In parallel, the Guidelines’ ambiguity about the number of performance criteria enabled them to proliferate, and the limited scope of these criteria (macroeconomic variables) led Fund staff to rely increasingly on reviews and prior actions to cover other economic policy areas.

In 2000, a refocused set of interim guidelines was approved. When the Fund was blamed for precipitating the Asian financial crisis, the management introduced a clear inflexion in the guidelines’ implementation and launched a review which intended to streamline conditionality and concentrate on the Fund’s core work areas. These initiatives led to the approval of the current 2002 Guidelines.

Box 4

Conditionality and programme design for using IMF and ESM resources: a comparison

This box aims to briefly illustrate the rules and processes related to the use of ESM resources, in parallel with the features of the IMF’s framework, on the basis of the current ESM Treaty.¹⁹ In this respect, it should be noted that, at the December 2018 Euro Summit, leaders agreed to enhance the role of the ESM and mandated the Eurogroup to prepare amendments to the ESM Treaty by June 2019. The primary focus of this box will be on those facilities of the ESM that are actually comparable to those of the Fund (in particular the ESM Loan facility and the precautionary facilities).²⁰

There is no exact equivalent in the ESM Treaty of the two key purposes of the Fund’s lending activity (b.o.p. assistance and resource safeguard) (ESM, 2012a).

¹⁹ The European Stability Mechanism (ESM) was set up in October 2012 as a successor to the European Financial Stability Facility (EFSF). The EU provides additional forms of financial assistance that will not be examined here: these include Balance of Payments Assistance (BOP) reserved for EU countries which have not adopted the euro and Macro-financial Assistance (MFA) for non-EU countries that are part of the European Neighborhood Policy.

²⁰ The design of EFSF/ESM-supported programmes and the related conditionality are legally governed by the ESM Treaty (ESM, 2012a). The latter includes, in particular: paragraphs 6, 8, 13 and 14 of the “Preamble”, Article 3(Purpose), Chapter 4 (Operations) and related Articles 12 to 21, plus Article 32(Legal status, privileges and immunities). The former are complemented by specific Guidelines, including those on Loans and Precautionary Financial Assistance (ESM, 2012b and 2012c), and by other legal documents on the ESM’s lending activities (ESM, 2012d, 2012e, 2012f and 2014). The European Commission and the ESM also took stock of their collaboration in past euro area programmes (ESM, 2018a) and outlined their future collaboration on programme design in a joint position statement (ESM, 2018b) which was officially endorsed at the Euro Summit meeting of 14 December 2018.

First, the ESM is explicitly tasked with mobilising funding and providing stability support to ESM members which are experiencing, or are threatened by, severe financing problems, if this is required to safeguard the financial stability of the euro area as a whole and of its Member States. There is no specific reference to members' b.o.p. financing needs, which are crucially important to motivate Fund programmes (Article 3). Therefore, it could be argued that the ESM's mandate is broader than that of the IMF because financial instability may have b.o.p. implications in the euro area but not necessarily in all cases. The focus on financial stability is justified by (i) the strong economic and financial links between euro area countries; (ii) the related broader scope for euro area lending, as demonstrated by the legal possibility of using ESM financing to re-capitalise the financial institutions of a euro area member (Article 15)²¹ and to purchase sovereign bonds in the primary and secondary markets (Articles 17 and 18)²²; (iii) as well as by the decision to remove the direct recapitalisation instrument (DRI) from the ESM toolkit, with the ESM assuming the role of backstop to the Single Resolution Fund – a role which has no parallel in the IMF setup.

Second, the European framework lacks detailed and formalised policies for resource protection comparable to those of the Fund – for instance, the IMF's financing assurances and exceptional access policy (Section 2.1). The safeguard issue is addressed partly by the ESM's obligation to lend under strict conditionality, the establishment of a warning system to ensure timely repayment of ESM financial assistance (Article 13(6)), the ESM's preferred creditor status ("Heads of State or Government have stated that the ESM loans will enjoy preferred creditor status in a similar fashion to those of the IMF, while accepting preferred creditor status of the IMF over the ESM": ESM Treaty, Preamble, para. 13) and by its immunities and privileges.

Except for the future Precautionary Conditioned Credit Line (PCCL), ESM loans are always tied to conditionality. Article 3 stipulates that "the purpose of the ESM shall be to mobilise funding and provide stability support under strict conditionality". Generally, the design and management of ESM-supported arrangements can be summarised as follows. According to the current ESM Treaty, conditionality is first negotiated by the European Commission (EC), in liaison with the ECB, and "wherever possible" with the IMF; conditionality is then specified in a written memorandum of understanding (MOU) with the borrowing country, which is signed by the EC on behalf of the ESM. In this respect, the December 2018 Euro Summit agreed that going forward the European Commission, in liaison with the ECB and the ESM, will collaborate on the design and negotiation of policy conditionality as well as on the preparation of Debt Sustainability Analyses. In all these activities, the ESM will contribute from its perspective as lender. The ESM will also co-sign the MOU with the Commission. At the June and December 2018 Euro Summits, leaders agreed that conditionality for accessing the ESM PCCL would be replaced with a commitment from the beneficiary Member State to continuous compliance with more effective ex ante eligibility criteria. They also agreed that countries requesting a PCCL would not be required to sign a MOU detailing ex post conditionality.

The decision whether to grant financial assistance based on the commitments specified in the MOU lies with the ESM Board of Governors, and must be taken by mutual agreement (i.e. unanimity). The arrangement is formally completed by a second legal document, the Financial Assistance Facility Agreement (FFA), which stipulates the relevant financial terms and conditions, as

²¹ The provision of ESM financial assistance for the recapitalisation of financial institutions has already been used in the case of Spain.

²² Sovereign bond purchases by the ESM have never been activated.

well as the choice of facility (Article 13 of the ESM Treaty). If the country deviates significantly from the programme, disbursements may be withheld.

This process displays a number of similarities with what happens at the IMF. However, there are some important differences:

First, in the ESM's case, both the duration of the arrangement and the length of the repayment period are left unspecified ex ante for the ESM Loan facility (Cheng, 2018). In practice, these two key parameters of programme design are typically agreed by the ESM's Board of Governors on a case-by-case basis, and included in the relevant FFA. The wider room for flexibility available to the euro area authorities has in fact made it possible to arrange programmes with a longer duration, designed to address situations requiring policy adjustments with an eminently structural component, that could only be implemented in a longer-term perspective (as a matter of fact, the number of conditions per ESM-supported programme has tended to be greater than the IMF's).

Second, as noted by Tumpel-Gugerell (2017), in the ESM context, the criteria for compliance monitoring and reporting are less formalised than in the IMF context. The ESM has certainly drawn from the IMF's practice of prior actions (also called "milestones") for certain key measures which must be implemented before concluding a review and making a disbursement. However, the criteria for approving possible waivers and the related counterbalancing remedial measures remain unspecified. In practice, however, this has not prevented the ESM from implementing its conditionality in a manner that could ultimately be very close to the Fund's.

Overall, the provisions described above suggest that the ESM framework is less structured than the Fund's. Nonetheless, this state of affairs did not pose fundamental hurdles to managing crises in the euro area, partly in cooperation with the Fund (for a review of these experiences, see Tumpel-Gugerell, 2017). The lack of this precise framework may reflect:

- the desire to retain some operational flexibility for managing crises in the euro area;
- the unique features of economic governance settings in Europe, in which crisis management procedures are combined with a much more developed framework for crisis prevention (all euro area countries are subject to intense policy scrutiny even in the absence of ESM support, different from what happens in the IMF's case).

4 The empirical evidence

The empirical analysis of IMF programmes is hampered by measurement difficulties and the lack of adequate granular data. A proper assessment of how conditionality and programme design contribute to the effectiveness of Fund lending would require the ability to answer central questions such as: Is conditionality appropriate and effective for addressing countries' problems? Are conditions complied with? Do programmes achieve their policy targets? Unfortunately, empirical analyses in this field are fraught with substantial hurdles, the most important ones being related to the measurement of key concepts such as the “depth” or ambition of conditionality, country ownership (Box 5) and programme success (Box 6). The brief overview of the empirical literature presented in Section 4.1 illustrates the difficulty in reaching clear-cut conclusions on the effectiveness of IMF programmes. The data needed to answer more specific questions – such as appropriately granular details on the composition of the required fiscal adjustment or on the content of structural conditions – are not readily available.

With these problems in mind, the facts reported in Section 4.2 aim to provide preliminary indications that could usefully contribute to framing the discussions on the 2018 ROC. In particular, the analysis includes a description of the main features of the programmes supported by the IMF during the 2008-18 period, with special emphasis on issues such as European programmes and those with exceptional access to Fund resources, and examines the changes in key macroeconomic variables associated with these programmes, using a “before-after approach”. As is evident, this exercise can only offer a preliminary description of economic developments in countries under an IMF programme; properly assessing the effectiveness of IMF programmes would require a much more sophisticated analysis, which is beyond the scope of this report.

4.1 A non-technical review of the empirical literature

The effectiveness of IMF programmes is typically gauged in terms of their macroeconomic outcomes, using a variety of methods. The main variables considered in the literature include GDP growth, inflation, selected b.o.p. and international investment position magnitudes, financial asset prices and indicators of public finances and income distribution.²³

One important difficulty that arises when assessing the success of IMF programmes is potential selection bias, due to the fact that the borrowing countries' starting point is generally a difficult economic situation (current/financial account crises, sovereign debt crisis, or economic

²³ Reflecting the general lack of detailed information on IMF programmes, only a limited number of academic studies have been able to test the effects of specific elements of Fund conditionality and programme design. Other studies typically resort to dummies to capture the fact of having or not having an IMF programme, with a greatly reduced ability to provide useful policy insights.

recessions). Thus, analyses that do not account for this circumstance tend to underestimate the success of IMF programmes. Despite a growing body of literature on different techniques for handling non-random selection, one caveat to bear in mind is that results still tend to depend crucially on the specification of the selection process, and hence the empirical evidence remains inconclusive.²⁴

Earlier studies were inconclusive as to whether and to what extent IMF programmes and their conditionality achieved their macroeconomic objectives.

Most of the multi-country studies performed between 1978 and 1998, as summarised by Haque and Khan (1998)²⁵, showed that programmes generally improved the external balances. The decline in inflation was statistically insignificant in most cases, as the effects of demand contraction were offset by devaluation. Growth was depressed during stabilisation due to demand contraction, but recovered over time helped by structural reforms (e.g. Conway, 1994; Bagci and Perraudin, 1997). In contrast, Killick (1995) found no effect on current account and neutrality on growth. Mussa-Savastano (1999) found that between 1977 and 1997, only 45% of programmes could be deemed successful, using the share of total IMF loans disbursed as an indicator of success.

In the last 20 years, studies have continued to show mixed results, particularly on growth.

Although Dicks-Mireaux et al. (2000), Atoyan and Conway (2006) and Fidrmuc and Kostagianni (2015) found significant positive effects on growth, other studies showed negative impact during or after the programme, with aftermath benefits undercompensating for the losses (Przeworski and Vreeland, 2000; Hutchison, 2001; Bird, 2001). Barro and Lee (2005) found negative effect on growth in the five years following the programme, with a 1% increase in IMF lending lowering annual growth by 0.27 pp. Dreher and Vaubel (2004) estimated lower growth by 1.5 pp per year²⁶ and found weak mitigation from conditionality compliance. In his 2006 paper, Dreher attempted to separate potential growth effects arising from policy advice, the actual disbursements and conditionality, with ambiguous results. Finally, a number of papers (Joyce and Noy, 2008; Bird, 2002) have highlighted the tendency for programmes to go off-track and the proliferation of sequential programmes.

Studies isolating the impact of IMF conditionality on policy targets and macroeconomic objectives have found negative correlation between the number of conditions and meeting the policy targets, while macroeconomic outcomes typically fell short of expectations overall.

Based on a panel regression, the IMF (2012) conditionality review found that parsimony supports implementation. On a more critical note, Dreher and Vaubel (2004) found that conditionality does not significantly affect any of the key policy targets. Baqir et al.

²⁴ These considerations may explain why a variety of methods had been applied, ranging from non-parametric statistical techniques, e.g. the “before-after” and “with-without” approaches, to more sophisticated policy reaction functions that control for exogenous and initial factors, using the GEE or instrumental variables. In its regular ROCs, the IMF has mostly used the “actual-target” approach, which compares actual performance under the programme with the objectives specified in the programme.

²⁵ The principal and most frequently quoted studies covered include Reichman and Stillson (1978), Connors (1979), Killick (1984), Pastor (1987), Gylfason (1987), Goldstein and Montiel (1986), Khan (1990), Conway (1994), Bagci and Perraudin (1997) and Dicks-Mireaux et al (2000).

²⁶ This is in line with results of other studies, estimating the costs of IMF programmes in terms of foregone output to be in the range of 0.7-2.5 percentage points for each year of programme participation (Hutchison, 2004).

(2005) found that most programme objectives were rarely fully achieved and fiscal and monetary targets were ambitious. Outcomes typically missed forecasts for growth and inflation, even when intermediate policy targets were met, but were broadly in line with the current account objectives; all three objectives were met simultaneously in only about 10% of the programmes. The IMF, in its 2011 review of conditionality, found that the macroeconomic and social effects of programmes were generally positive. In its 2015 crisis programme review, it stated that internal devaluation proved difficult to achieve, with growth and export shortfalls also reflecting larger than expected fiscal multipliers and modest dividends from structural conditionality.

Although the fiscal balance has tended to improve in most programme countries, the composition of the improvement has differed (Bulir and Moon, 2003). In countries with structural conditionality, the adjustment has come primarily through sharp expenditure compression, while conditionality had no impact on revenue collection (see also Cho, 2009). In contrast, Crivelli and Gupta (2014 and 2016) have found that conditionality impacts tax revenue positively, being more effective when targeted to a specific tax. Meanwhile, Gupta (2018) argues that in developing economies, conditionality on expenditure has a more substantive long-term impact, while conditionality on social spending appears ineffective in the medium term. Tanzi and Davoodi (1998) argued that IMF programmes induce governments to curb public investment, negatively affecting growth. Finally, Rickard and Caraway (2018) found that IMF loans with public sector conditions prompt cuts in the wage bill only in the short term; these effects do not persist in the long term because of domestic political pressure.

The discussion on the channels affecting the fiscal balance is linked to the deeper question of the quality of fiscal adjustment, an issue which has long concerned the IMF (IEO, 2003; IMF, 2006). The question does not only refer to whether expenditure cuts are better than tax increases or vice versa, but extends to the quality of fiscal institutions and to the need to change structural aspects related both to fiscal revenues and expenditure. Guerson (2013), using a DSGE model for Hungary, finds that a reduction in current expenditure has the smallest effects on growth but that reducing government investment is costly, as is raising corporate taxes. These results are similar to those found for larger samples of countries by Alesina and Perotti (1996) and Alesina et al. (2015). MacKenzie et al. (1997) examine fiscal consolidation in eight economies and conclude that expenditure cuts in health and education are particularly damaging if not reversed quickly. The same applies to investment (see for example Carnot, 2013 and Carriere-Swallow et al., 2018). In spite of this evidence, Buira (2003) finds that cuts in expenditure in IMF programmes tend to focus on investment and social expenditure because they are usually easier to cut than wages and salaries.

Revenue and expenditure structures are crucial to facilitate more efficient and less damaging consolidation (IMF, 2006). MacKenzie et al. (1997) find that countries with better public expenditure management systems and efficient tax administrations had much better results in terms of the sustainability of consolidation and that negative demand effects of consolidation were limited. However, structural

changes, of course, take longer to implement, which has implications for the speed of adjustment that is contained in programmes – faster adjustments that go for low-hanging fruit may be less durable.

IMF programmes have tended to adversely affect income equality and distribution (Johnson and Salop, 1980; Sisson, 1986; Pastor, 1987; Garuda, 2000). Killick (1984) showed that IMF programmes led to large declines in real wages, sharp rises in unemployment and increasing income concentration. Blanton et al. (2018) find that participation in IMF programmes causes the shadow economy to increase because of the programme's impact on economic hardship and the capacity of the state to clamp down on such activity. Hoddie and Hatzell (2014) note a deterioration, at least in the short to medium term, in health systems. Finally, Kentikelenis et al. (2016) find that policies intended to smooth the social consequences of the required macroeconomic adjustment are inadequately incorporated into programme design.

The empirical literature is mixed on whether IMF programmes have catalytic effects (for a discussion on earlier contributions, see Cottarelli and Giannini, 2002). Findings depend partly on the methodology used to deal with selection bias, reverse causality and omitted variables. Most papers analysing the impact of IMF approval in terms of net capital flows find no evidence of catalytic effects (Bird and Rowlands, 2008; Hajivassiliou, 1987; Rodrik, 1995). Some authors such as Jensen (2004) and Edwards (2006) even find a negative effect. Van der Veer and de Jong (2010) find that the IMF is effective in mobilising private capital flows for countries that do not restructure their debt. One hurdle for these studies is that the required adjustment in the current account balance, which is a key objective of most IMF programmes, by definition implies lower net capital inflows. In this regard, Gosh et al. (2002) look at capital account crises during the 1990s and point out that the absence of catalytic effects was associated with larger current account adjustments than originally envisaged. In order to deal with the potential bias described above, Benelli (2003) compared actual net private capital flows with projected values; he found that IMF staff tended to generate relatively optimistic projections about private capital inflows in order to deal with binding lending constraints, and that this resulted in a negative correlation between successful IMF programmes²⁷ and the size of IMF lending. From another viewpoint, Bauer et al. (2012) find that IMF programmes have a positive catalytic effect on FDI in democracies, and a statistically significant negative catalytic impact in autocracies.

Another stream of papers have used bond spreads as a proxy to gauge investors' willingness to lend to programme countries. Mody and Saravia (2003) looked at new debt issues and found that country fundamentals do matter in determining the effects of IMF programmes: for countries with a very low level of reserves or a very high debt-to-GDP ratio, spreads were higher with a programme rather than without a programme. Arabaci and Ecer (2014) found that IMF arrangements are associated with an improvement in borrowers' access to international financial markets in terms of lengthened maturity; moreover, catalytic

²⁷ A programme is defined as successful if the initial programme projections for net private capital flows are met or exceeded.

effects are higher in countries with no access to concessional credit, meaning those with better economic fundamentals. Scheubel, Tafuro and Vonessen (2018) explore the existence of financial market stigma by analysing the impact of IMF programme events on T-bill rates; they find no systematic evidence of such a relationship; instead, countries experiencing a rise in T-bill rates have greater likelihood of accessing a new Fund programme – a result that corroborates the so-called “revolving door hypothesis” of repeated IMF lending.

Finally, other authors have investigated whether compliance with IMF conditionality affects catalytic effects. Edwards (2000) found that programme countries which failed to implement agreed reforms were penalised in terms of access to capital markets. Similarly, Kutan et al (2012) have found that if governments fail to implement conditions on reform, any positive catalytic effects are reverted and that those effects tend to be transitory and vanish after the completion of IMF programmes.

4.2 IMF-supported programmes: main features and economic outcomes

4.2.1 Overview of programme conditionality and economic outcomes, 2008-18

This section provides an overview of the conditionality and outcomes of Fund-supported²⁸ programmes approved during the 2008-18 period (73 programmes in total, signed by 41 countries). The analysis distinguishes across different time periods (including a reference to the 2002-07 pre-crisis period), programme types and country groups.²⁹ The dataset is a version of the IMF’s Monitoring of Fund Arrangements (MONA) database, as used in Scheubel, Tafuro and Vonessen (2018) and Scheubel and Stracca (2016) that includes information on the size, type and conditionality of all programmes approved by the IMF since 1992. The analysis of programme outcomes is based on a complementary dataset of macroeconomic variables, obtained from the World Economic Outlook, for the same set of programmes approved between 2008 and 2018³⁰, analysed through the same categories and groups of countries.

Regarding conditionality, the MONA database offers information on the number and type of conditions, the policy areas to which they apply and whether these conditions are complied with or not. As described in Section 3.1, conditionality is currently organised around quantitative and qualitative dimensions, captured by

²⁸ Only GRA-supported and “blended” programmes – at least 50% of which is financed by GRA resources – are considered. The GRA (General Resources Account) is the source of non-concessional lending to countries experiencing BOP problems. Blended programmes are financed from both the GRA and the Poverty Reduction Growth Trust (PRGT), which provides concessional lending to low income countries.

²⁹ See Annex 3 for the full list of programmes and Annex 4 for the list of variables and sources.

³⁰ Although the Fund’s 2018 ROC refers to the 2012-17 period, this report considers a wider time horizon in order to be able to review a sufficiently abundant set of programmes with realised macroeconomic outcomes.

quantitative performance criteria (QPC), indicative targets (IT), prior actions (PA) and structural benchmarks (SBs).³¹ For each approved arrangement, MONA contains information on the number of conditions in each category, together with the policy areas to which these refer, as well as whether these conditions are met on time, met partially or with delay, unmet, delayed or waived. There are however several caveats to the MONA database. The main one is that there are gaps and inaccuracies in the reported data, in terms of both the number of conditions³² and the classification of these conditions in the above-mentioned categories.³³ Irrespective of the data caveats, it is worth stressing that the mere number of conditions does not adequately capture the “depth” of conditionality, i.e. the extent to which conditions are meant to bring about substantial and lasting changes in the structure of the economy.³⁴ However, a granular measurement of this aspect of conditionality is challenging in large samples and is beyond the scope of this report.

A first set of insights into the features of programme conditionality is obtained by looking at programmes approved at the height of the global financial crisis (2008-12) and comparing them with those approved in later years (2013-18), as well as in the pre-crisis period (2002-07). Table A.2 and Chart A.1 show that there are notable differences between these groups. As expected, post-2008 programmes dwarf in size those approved before 2008, even when exceptional access programmes are excluded from the sample. Moreover, the 2008-12 period is characterised by a substantial number of exceptional access programmes (one-third of the arrangements approved during that period entailed exceptional access), while in 2013-18, the share of these programmes declined to pre-crisis levels. On the other hand, there has been a large shift towards EFF programmes since 2008, and especially since 2013, as 58% of the programmes approved between 2013 and 2018 were EFFs. This is likely to reflect the fact that in an increasing number of countries, deep structural problems were at the root of b.o.p. needs, as well as a move from emergency crisis lending to longer, more structurally-oriented arrangements. At the same time, there has been a large reduction in SBAs approved on a precautionary basis since 2008, reflecting the severe consequences of the global financial crisis.

The average number of conditions per concluded review dropped in the immediate aftermath of the global financial crisis but increased again after 2013. Chart A.1e shows that programmes approved between 2008 and 2012 included on average half of the conditions present in the pre-crisis arrangements, even after accounting for the elimination of the SPCs after 2009. The increase in the average number of conditions since 2013 is consistent with the increase in the number of EFF arrangements and the shift from crisis-fighting to more

³¹ A fifth category (structural performance criteria – SPC) was eliminated in 2009 as part of the reform of lending and conditionality – see Section 3.1 for details on related discussions.

³² Takagi et al. (2014) find that, based on original programme documents, the number of structural conditions in the Stand-By Arrangements approved between 2008 and 2011 was greater than the number reported in the IMF’s MONA database.

³³ The MONA database cannot be used to track conditions that are equal in essence but are slightly modified to adjust for programme specificities. As part of the current ROC, the IMF is undertaking a review of MONA to improve its accuracy and consistency.

³⁴ The IMF’s own research finds that the depth of conditionality is inversely related to the number of conditions in a programme. See IMF (2012), “2011 Review of Conditionality. Background Paper 1: Content and Application of Conditionality”.

structurally-oriented arrangements. The focus on crisis-fighting could also be the reason for the temporary decrease in structural conditionality in programmes approved between 2008 and 2012 (as shown in Chart A.1f); conversely, in pre- and post-crisis programmes, structural conditions accounted for three-quarters of conditionality. Regarding the policy areas to which conditionality apply, Chart A.1g shows that across all periods conditionality is dominated by fiscal and public sector conditions, followed by financial sector ones. Chart A.1g also shows that there has been an increase in the share of fiscal conditions and a corresponding decrease in financial sector conditionality in programmes approved after 2013.

Programme completion rates and compliance with conditionality vary over time. As Chart A.1h shows, 20% of pre-crisis programmes went off-track³⁵, whereas this share increased to about one-third for programmes approved after 2008, probably reflecting the challenges of the global financial crisis period. In contrast, Chart A.1i shows that around 70% of conditions in programmes approved after 2008 were met fully and on time, a much larger share than in pre-crisis programmes (although it is true that pre-2009 conditionality included SPCs which were subject to less flexible assessments than the current SB). Finally, Chart A.1j shows that the average number of PAs by review decreased substantially since 2008, although this number has ticked up again since 2013. The apparent tension between the growing number of off-track programmes since 2008 and the improved programme completion rates merits further investigation, which is outside the scope of this report. However, one aspect in this regard could be the upward bias of implementation rates for programmes where reviews are not completed, as programme performance is not reported in these cases (IMF, 2019, fn. 9).

The outcomes of Fund programmes in our sample are assessed by examining the behaviour of selected economic variables before, during and after IMF programmes (“before-after approach”). The variables include GDP growth, the current account balance, gross public debt, the primary balance, foreign reserves and net private capital inflows.³⁶ Pre-programme, programme and post-programme periods comprise complete years: the pre-programme period ranges from year t-3 to t-1, the programme period from t to t+2, and the post-programme period, t+3 and t+4.³⁷ It is assumed that programmes affect most variables in the year that the programme starts (year t), but it is important to keep in mind that programmes can start at any time during the year and that new policy measures may take some time to be implemented and take effect slowly. In addition, the analysis of recent

³⁵ A programme is considered to be off-track when it is ended or interrupted with less than half of the scheduled reviews completed.

³⁶ Although IMF programmes are also supposed to crowd-in funding from other international financial institutions (IFIs) and bilateral donors, the empirical investigations conducted in this report focus on the response of private capital flows. These flows are driven by objectives that generally do not coincide with those of the official sector and may therefore provide a better basis for gauging the signalling role of Fund arrangements.

³⁷ The length of IMF programmes varies between two and four years, but assuming uniform pre-programme, programme and post-programme periods facilitates comparison among programmes and is an acceptable approximation for our sample.

programmes relies partly on projected outcomes.³⁸ On average, however, results do not change when projections are excluded.³⁹

On average, the relevant variables improved in the aftermath of programmes that started between 2008 and 2018 (see Charts A.2a and 2b).⁴⁰ In the run-up to an IMF-supported programme, the average programme country experienced a marked growth slowdown, a deteriorating external and fiscal position, rising inflation and a significant reduction in net capital inflows. Moreover, public debt rose and foreign reserves declined. After the approval of a Fund-supported programme, these trends started to reverse. In particular, the external and fiscal positions improved considerably, growth typically rebounded and inflation declined. Net private capital inflows stabilised or recovered slightly.

At the same time, IMF staff projections for growth at programme approval turned out to be too optimistic in most cases (see Chart A.2a, second column). Projections for the public debt ratio – while quite accurate in the short term – turned out to be too optimistic for the post-programme period; only the improvement in the current account was larger than projected on average. The evolution in real GDP growth conditional on the size of fiscal adjustment can shed some light on the potential reasons for the disappointing growth outcomes.

As can be seen from Chart A.3, growth outcomes as well as staff projection errors are not significantly different for programmes that entailed a relatively large fiscal adjustment over the programme period compared with the remaining programmes in the sample. For the purpose of this comparison, a “large” fiscal adjustment is defined as a three-year adjustment of the primary balance (starting at programme approval) greater than 3% of GDP.⁴¹ Further evidence of this aspect is provided by the fact that the growth rates associated with programmes with a larger share of fiscal conditions⁴² do not appear to differ significantly from those associated with the other programmes. This finding does indeed express a mere correlation and disregards other factors that can influence the success of Fund programmes, such as initial conditions. Nonetheless, it suggests that relative growth outcomes might not be affected by either the size of the fiscal adjustment or the relative weight of fiscal conditions. Analysis by the IMF suggests that the composition of fiscal adjustment may have weighed on growth; particularly for countries that met

³⁸ Most data are taken from the October 2018 database of the World Economic Outlook. Values of macroeconomic variables for 2018 and later are projections from the same WEO, October 2018.

³⁹ Given that we are only conducting a descriptive analysis, it must be borne in mind that the analysis does not account for unanticipated exogenous shocks, differences in initial conditions between countries or other factors that might have influenced the effect of IMF programmes. For instance, given the starting years of the sample, i.e. the peak of the crisis, one would expect an improvement in most economic variables thereafter, regardless of the existence of an IMF programme.

⁴⁰ Each programme is taken as a single observation, which implies that some countries exhibit more than one observation over the time horizon considered. The results are robust to excluding successor programmes, or to avoiding possible overlaps between the different periods by treating the respective observations as missing.

⁴¹ According to the IMF analysis, this threshold approximates the top quartile using historical data from 1990 to 2011 for advanced and emerging economies, with debt greater than 60% of GDP (see [IMF, Debt Sustainability Analysis for Market-Access Countries](#)).

⁴² In order to detect these programmes, the share of fiscal conditions over the total number of conditions attached to any programme is calculated, and those belonging to the upper quartile of the distribution are selected. While the share of fiscal conditions is not necessarily correlated with the size of fiscal adjustment, it can be considered a proxy due to the importance that the IMF attaches to fiscal objectives.

fiscal targets by increasing fiscal revenues and cutting public investment, projections errors tend to be larger (IMF, 2019).

4.2.2 Programme conditionality and outcomes across programme categories

To further refine the analysis of conditionality, the programmes in the database have been grouped across certain categories or dimensions, as shown in Table A.1. The main features of these programme categories and the associated macroeconomic outcomes are discussed in this section.

A first category to consider is exceptional access (EXA) programmes. For the purpose of our analysis, they are defined as programmes whose cumulated amount at approval exceeds the normal lending limits sanctioned by the Fund's "exceptional access framework".⁴³ The emphasis on these programmes is justified by two considerations: first, exceptional access programmes do naturally tend to pledge the greatest part of available resources (a quarter of the arrangements over the 2008-18 period entailed exceptional access and this group accounted for more than 80% of total IMF lending during that period); second, these programmes are likely to be associated with countries with more problematic imbalances and therefore with greater challenges for IMF conditionality and programme design. Either way, they deserve careful scrutiny.

Programmes for euro area countries are an important subset of the exceptional access category. In the 2008-18 period, four euro area countries received financial assistance from the Fund (Cyprus, Greece, Portugal and Ireland). All of them – with the exception of Cyprus – were granted access above normal limits. Overall, they accounted for more than one-third of the IMF's loans approved over the past decade.

Another aspect to scrutinise is the difference between SBA and EFF. As noted earlier, the number of EFFs has increased over the years. Compared to standard SBAs (the workhorse of IMF crisis lending instruments), EFFs are longer, have longer repayment periods⁴⁴ and are typically agreed with countries facing medium-term b.o.p. problems that are due to structural weaknesses. SBAs can also be used as a precautionary instrument (though subject to the same conditionality as standard SBAs) for countries that do not meet the strong pre-qualification conditions required to access precautionary facilities such as the Flexible Credit Line (FCL) and the Precautionary Liquidity Line (PLL). Programmes entailing sovereign debt restructuring are also considered, in view of the Fund's established thinking on these matters, which points to the treatment of sovereign debt as a crucial aspect of programme design.

⁴³ These limits are normally expressed as a ratio to country quotas and set on an annual and cumulated basis. Both limits have changed during the chosen reference period: from 100% of quota on an annual basis and 300% overall before 2009, to 200% annual and 600% overall from 2009 to 2016, and – following the IMF quota increase in 2016 – to 145% and 435%, respectively.

⁴⁴ The length of EFFs is three to four years, compared with one to two years for regular SBAs (three-year SBAs are also possible, although not frequent). EFFs have repayment periods of four-and-a-half to ten years, whereas SBAs have repayment periods of three to five years.

Last but not least, one further important dimension to analyse pertains to programme sequences – i.e., strings of programmes approved within two years of one another for a given country. This category, which can also be defined as “serial borrowing”, represents a relevant fraction of the arrangements approved in the last decade (44 out of 73). Importantly, the successor programmes within a certain sequence may in certain cases signal the inability to solve b.o.p. problems within the specific timeframe of a single arrangement, and therefore the potential failure to attain one of the key statutory objectives of IMF lending. In this sense, successor programmes are an obvious testing ground for assessing the effectiveness of Fund programmes. For all these reasons, it is important to inspect more closely the features and outcomes of these arrangements, as well as the links between the programmes within a certain sequence. These matters are discussed in Section 4.2.3.

The analysis of conditionality across these programme categories between 2008 and 2018 shows that differences seem to be largely consistent with the distinctive features and purposes of the various programme types, as well as the specific financing needs and circumstances of countries requesting them (see Tables A.3 and 4, and tables and charts in Annex 2).

Exceptional access programmes entail more conditions than normal access ones, rely to a larger extent on prior actions, have lower levels of compliance and are more likely to go off-track; in terms of outcomes, the improvement in economic variables seems to take longer. Exceptional access programmes also feature a higher share of financial sector conditions, likely suggesting a more severe crisis involving both the sovereign and the financial sector. Chart A.4 shows that, on average, countries with exceptional access programmes experienced a deeper slump in growth and a surge in public debt ratio, while these levelled off in the other countries; the deterioration in the fiscal position was reflected in a higher deficit which was reabsorbed only after the completion of the programme. The external adjustment proved somewhat stronger and was associated with a dramatic drop in private capital inflows. The recovery observed after the completion of EXA programmes suggests that countries regained market access, consistent with the expectation under the exceptional access policy. Assessing whether the weaker economic performance reflects a too benign assumption on the size of the economic adjustment needed during the programme requires further analysis; interestingly, the actual growth rates in the first two years of the programmes (i.e. t and $t+1$) were much lower than IMF staff projections.

Programmes with euro area countries⁴⁵ are generally associated with a larger share of financial sector conditions as well as with more structural conditions related to labour markets and competition than other programmes. In terms of outcomes, euro area countries underwent a protracted recession followed by a slow recovery, and the deterioration of fiscal and external positions required a large adjustment. In particular, financial sector conditions accounted for almost one-third of

⁴⁵ Results are very similar when comparing programmes in “advanced” countries with those in emerging market ones, given the fact that the group of advanced economies consists of the four euro area countries and Iceland.

conditionality in euro area programmes, reflecting the nature of crises experienced by these countries. Two other areas with a relatively larger share of euro area conditionality are labour market reforms and “other” structural measures (most prominently competition and product market reforms). Other dimensions – relatively high off-track probability and relatively low “strict compliance” rates (i.e. the extent to which conditions are met fully and on time) – could be explained by a more severe impact of the crisis, more complex conditionality (due to the structure of these economies) or a lack of ownership; these characteristics, however, change when the two Greek programmes are excluded from the sample. Turning to outcomes, the comparison (see Chart A.5) reveals a qualitatively similar pattern to the one found in other arrangements under exceptional access relative to normal programmes: a protracted recession followed by a slow recovery; a strong deterioration in fiscal and external positions requiring a large adjustment; and net private capital flows turning negative and recovering gradually. As said, with the exception of Cyprus, all euro area economies in our sample were exceptional access cases.⁴⁶

The comparison between SBAs and EFFs shows that the latter arrangements have a larger number of conditions and rely more heavily on structural benchmarks; countries under EFF programmes feature lower growth before the programme, suggesting a lack of competitiveness and larger structural growth impediments. On the other hand, SBAs seem to contain more conditionality applied to national central banks. SBAs are more likely than EFFs to go off-track; at the same time, they entail fewer prior actions. As they are shorter, they are most likely to be used for “standard” b.o.p. problems and contain less structural conditionality. In terms of outcomes, countries entering EFF programmes feature lower growth and a higher level of public debt compared with countries entering an SBA (see Chart A.6). However, the differences in terms of growth between these types of programmes tend to disappear over time.

Precautionary SBAs have a lower number of conditions than standard ones and rely to a larger extent on quantitative indicators and indicative targets rather than structural benchmarks. Precautionary SBAs also have on average the smallest number of PAs among all programme categories. They have better compliance rates and especially “strict” compliance rates, although a large share of these SBAs does not get past the first two reviews, probably due to their precautionary purpose. In terms of outcomes, countries with precautionary programmes exhibited on average more stable growth rates, lower public debt levels and smaller fiscal adjustment. These results are consistent with the scope of this kind of programme, which aims to give the IMF's seal of approval to countries that typically do not need to draw from the IMF to face an imminent crisis, but want to retain the option to do so should they need it.

Programmes involving sovereign debt restructuring feature more conditions and a higher share of fiscal-related ones. Preliminary evidence⁴⁷ suggests that

⁴⁶ Including the Iceland programme in the euro area sample is equivalent to comparing programmes of advanced economies in our sample with emerging markets. The results are basically the same as in Chart A.1d.

⁴⁷ Only debt restructuring operations taking place during the implementation of IMF programmes are considered in this report. With regard to the date of debt restructuring operations, the sources employed are Trebesch (2014) and Bank of Canada (2017).

IMF programmes in combination with debt restructuring could have helped countries to improve their fiscal position and restore growth. These programmes have more prior actions, with compliance rates broadly similar to the rest of the arrangements, but show a somewhat worse performance in terms of programme completion rates. In terms of outcomes, as shown in Chart A.7, these countries entered their programmes with significantly higher levels of public debt, but on average, in the period under inspection, the debt burden was reduced and primary surpluses sustained, even after the programme expired. Private capital flows tended to contract significantly during the programme but then recovered. At the same time, economic growth turned out higher after the programme compared with the pre-programme period. However, these results are based on descriptive analysis, and it remains to be studied under what conditions debt restructuring constitutes a critical factor in the success of IMF programmes.

4.2.3 Serial borrowing and the success of IMF programmes

Serial borrowing (i.e., sequences of IMF programmes for the same countries over a relatively short period of time) seems to be the rule rather than the exception in Fund lending. Overall, of our sample of GRA-funded arrangements, around 40% were “single” – i.e., not followed by any programmes in the subsequent two years. The remaining arrangements had one or more successors (i.e., were part of a sequence of programmes) and involved almost half of the borrowing countries in the sample.

As noted earlier, successor arrangements are a convenient testing ground for gauging the success of Fund lending, as they may signal the persistence of b.o.p. problems that single programmes were unable to eradicate. Overall, over 40% of the successor arrangements in our sample (accounting for a sizeable part of GRA resources committed in the 2008-18 period) were either ended or interrupted before completing less than half of their scheduled reviews. Their greater likelihood of going off-track poses further challenges to the IMF, since off-track arrangements are on average associated with lower growth rates and smaller capital inflows compared with the others (see Chart A.8), in line with the literature (Section 4.1).

In order to deepen the analysis further, the “successor” programmes within a certain sequence are classified according to their financial size and drawing features, as defined by the Fund in a recent technical note on the measurement of programme success (IMF, 2019) – see Box 6 for a brief description of the proposed measure. In particular, a distinction is made between:

- **successor programmes associated with persistently “problematic” b.o.p. situations,** in other words, following the IMF definition, those programmes that have a drawing (non-precautionary) nature and whose annualised amount (their size divided by the number of years) is larger than one-quarter of the applicable annual access limit envisaged by the prevailing exceptional access policy. For simplicity’s sake, and without implying any normative judgement, these programmes are defined as “bad successors” in this report.

- **by implication, the remaining successor programmes would be “good”, being either purely precautionary or of a relatively small financial size.**

Overall, in the sample there are 27 successor programmes, of which 14 can be defined as “bad” and 13 as “good”.

These categories of programmes (“single”, “programmes followed by a successor” and “bad” or “good” successors) are combined and compared to check whether there are systematic differences in the associated conditionality features and macroeconomic outcomes (see Tables A.3 and 4).

Comparing “single” programmes with programmes followed by a successor.

The focus here is on whether there are systematic differences in terms of features and outcomes between “single” programmes and programmes that need to be complemented by an additional one, either of a “good” or a “bad” type. The main findings are:

Programmes followed by a “bad” successor have a larger number of conditions and rely to a much larger extent on prior actions than the other two categories. Interestingly, arrangements followed by “good” successors and those “good successors” themselves have a lower number and relative weight of PAs than “single” programmes. In turn, the latter rely to a greater extent on structural benchmarks; they stand out as having to meet a low share of QPCs as well.

In terms of policy areas, single programmes have a lower share of fiscal conditions and a larger share of financial sector conditions (all euro area countries minus Greece are in this group, but they account for just 14% of “single” programmes).

Compliance rates are better in “single” programmes and in ones followed by “good” successors – indeed, programmes followed by “bad” successors have twice as many “unmet” conditions as the other two groups.

As expected, “single” programmes have the highest completion rates, while arrangements followed by “bad” successors are the most likely to go off-track (both early and mid-way). An interesting finding is that single programmes, initial programmes followed by “good” successors and those successors either complete most reviews or are terminated quickly (after no more than two reviews), while a high share of programmes followed by “bad” successors go off-track mid-way.

In the case of programmes followed by a “bad” successor, we observe a slump in economic growth and a strong decrease in net private capital flows. The associated debt levels increase, suggesting larger fiscal imbalances in comparison with programmes followed by “good” successors (see Chart A.9). These results confirm the fact that IMF programmes followed by “bad” successors were not effective in addressing both b.o.p. and structural problems (see also Box 8 on Pakistan).

Comparing “bad” and “good” successor programmes. This comparison shows the differences between the successor programmes that are needed to address the b.o.p. problems left unsolved by the former arrangement (“bad successors”) and the

successor programmes that are just needed to consolidate the good results achieved by the former arrangement (“good successors”). The main findings are:

“Bad successors” have a substantially larger number of conditions (indeed, they have the largest average number of conditions by review across all of our categories). These arrangements also rely to a large extent on prior actions – the share of PAs in total conditions and the average number of PAs by review are, respectively, two and five times larger than in the case of “good” successors. Conversely, “good successors” rely to a larger extent on QPC and ITs.

“Bad successors” have slightly lower rates of compliance with conditionality – especially “strict” compliance, but otherwise similar programme completion rates to the “good successors”.

Regarding the associated economic developments, a recovery of economic growth is observed in both groups but stronger in the case of “good” successors. This suggests that, in the case of countries with “bad” successor arrangements, structural problems had not been fully addressed. Nevertheless, these countries succeeded in generating fiscal surpluses and in stabilising public debt levels (see Chart A.10).

On the whole, this preliminary analysis of serial borrowing sheds some light on the circumstances affecting the ultimate success of IMF arrangements. In particular, the programmes followed by successor arrangements associated with persisting b.o.p. imbalances perform rather poorly compared with the remaining ones over a variety of dimensions (number of conditions, conditionality compliance rates, programme completion rates, economic growth, capital flows, fiscal imbalances and debt levels). Broadly the same differences are observed by comparing “bad” successor arrangements with the remaining successor programmes.

These findings provide some support for the Fund’s proposed strategy for identifying successful arrangements. As noted in Box 6, this strategy rests on two pillars: one comprises the existence and characteristics of successor programmes (to determine the persistence of b.o.p. problems over time), while the other comprises the changes in countries’ vulnerability ratings before and after a programme. The first of these pillars has been replicated here, using the same IMF criteria; the second pillar could not be directly replicated due to lack of information about the staff’s internal vulnerability ratings – though the economic outcomes associated with successor programmes provide some kind of proxy for these ratings. The analysis presented in this section highlights the fact that the two analytical pillars of the Fund’s strategy for measuring programme success are interrelated: persistent b.o.p. problems are also associated with worse economic results (and possibly with deteriorating vulnerability ratings). At the same time, the relatively frequent occurrence of programmes featuring persistent external imbalances would seem to pose important policy questions regarding the effectiveness of IMF lending and conditionality design that require an appropriate response.

In any case, there is ample scope to improve on some aspects of the Fund’s proposed measures to ensure programme success, particularly those related to

the lack of transparency (in the case of countries' vulnerability rating) and to the inherent arbitrariness of the threshold used for identifying cases of persisting b.o.p. needs. More specifically, as noted in Box 6, the threshold used to distinguish between "low access" and "high access" drawing programmes (i.e., between "good" and "bad" successor arrangements, in the terminology adopted in this report) is certainly too low because many arrangements whose amount is well below the normal access limits in cumulated terms are classified as "bad successors". The choice of this threshold will remain a somewhat arbitrary exercise, but this does not imply that it should not be based on plausible considerations. In this respect, one aspect that remains to be explored is how the findings of this report would change if the threshold used to separate "good" and "bad" drawing successor arrangements were changed.

4.2.4 Main takeaways from the analysis of features and outcomes

The main takeaways of Section 4.2, which is mostly based on the GRA-funded programmes approved in the 2008-18 period, can be summarised as follows.

First, the global financial crisis had a visible impact on the performance and design of Fund-supported programmes. This is evident from the size of these arrangements, with the proliferation of EXA cases and a larger size of normal access programmes; their duration, as shown by the relentless increase in the number of EFFs to date; the large reduction in the number of SBAs approved on a precautionary basis; and the twofold increase in the number of programmes that went off-track.

Conditionality also changed during the years of the global financial crisis. The average number of conditions by review was cut in half during the global financial crisis (although this result does not capture the "depth" of conditionality) while conditions became more tilted towards quantitative targets and less towards structural benchmarks – perhaps an indication of the urgency of the problems at the time. An additional finding is that Fund programmes continued to be dominated by fiscal and public sector conditions, followed by financial sector ones, throughout the 2008-18 period.

Some of those trends have reverted in the most recent period (2013-18). The number of conditions, particularly the structural ones, picked up again, and the number of EXA cases returned to the lower pre-crisis levels (although these programmes still account for over 60% of GRA resources committed over the period). In turn, the proportion of EFFs out of total Fund arrangements has continued to increase, while the large number and size of off-track programmes remains an unsolved issue.

Second, countries' post-programme economic performance has tended to improve. In particular, the relevant macroeconomic variables generally improved vis-à-vis the pre-programme period. External and fiscal positions improved considerably, growth typically rebounded, inflation declined and net private capital inflows stabilised or recovered slightly. Nevertheless, it is also fair to say that IMF

staff projections for growth at programme approval turned out to be too optimistic in most cases.

Third, relevant differences were identified by examining specific categories of IMF programmes (see Table A.5, which summarises the conditionality arrangements and economic outcomes associated with these categories). In particular:

- **EXA programmes, which are typically associated with countries with pronounced imbalances, pledged a large majority of IMF resources, even though their number has fallen in the most recent period.** They typically entail more conditions, rely to a larger extent on prior actions and show somewhat lower levels of compliance. In addition, the improvement in economic variables seems to take longer than in normal access programmes, as would be natural in the case of countries affected by more severe imbalances and deteriorating market access.
- **Resources committed to euro area programmes, most of which were of EXA type, came to represent over 50% of total GRA committed resources in 2008-12, but fell to nil after the completion of the arrangements for Greece, Ireland and Portugal.** Euro area programmes showed a larger share of financial sector conditions than other programmes, reflecting the financial implications of the sovereign crisis, although fiscal conditions were prevalent during the height of the crisis; these programmes also featured more structural conditions than the rest. In terms of outcomes, euro area countries underwent a protracted recession followed by a slow recovery; the deterioration in fiscal and external positions required a large adjustment and net private capital flows even turned negative during the programmes and recovered gradually. Among this group of programmes, the Greek ones perform differently from those of Ireland, Portugal and Cyprus.
- **The proportion of EFF programmes increased markedly in the period under review; in turn, precautionary SBAs declined very markedly over the same period.** EFFs display on average a larger number of conditions and tend to rely more on structural benchmarks and are longer than SBAs. In terms of outcomes, despite a weaker starting point, economic outcomes generally improve during EFF programmes, with growth differences versus SBAs disappearing over time. Precautionary programmes show a lower number of conditions, rely to a relatively low extent on structural benchmarks, and exhibit more stable growth rates on average and lower public debt levels and require a smaller fiscal adjustment.
- **The number of programmes for countries undergoing some form of debt restructuring increased during the height of the global financial crisis and has remained relevant in terms of Fund resources.** These arrangements feature more conditions and a higher share of fiscal-related ones. Preliminary results would seem to suggest that IMF programmes in combination with debt restructuring could have helped countries to improve their fiscal position and restore growth – though this result would need to be confirmed by more sophisticated analyses.

Finally, the analysis of serial Fund borrowing presented in Section 4.2.3 sheds further light on the circumstances affecting the ultimate success of IMF arrangements. Overall, these results confirm that persistent external imbalances are not an exception, and that these imbalances pose severe challenges to the effectiveness of IMF lending and the design of conditionality.

Box 5

Measuring country ownership

The concept of ownership of IMF programmes has received increasing attention in recent years (see Section 3.2 and Box 2 on the perception of IMF stigma). National ownership of sound policies, together with adequate administrative capacity and strong political cohesion, are viewed as necessary (though not sufficient) conditions for successfully implementing Fund-supported programmes.

Despite the increased recognition of its relevance, the options for measuring country ownership remain limited in practice. The only way to measure ownership directly seems to be to conduct a survey among Fund staff and country authorities (IMF, 2012b). This box gives a brief overview of other, indirect approaches and their limitations.

One way to measure ownership is to check the degree of compliance with agreed conditions. Some facts in this respect are presented in Section 4.2. However, it must be taken into account that ownership is not the only factor determining compliance with conditions; implementation capacity, external shocks and other factors play a role as well. A related approach would be to look at the number of reforms backtracked by the authorities after they were first implemented. Again, the “willing assumption of responsibility” by country officials might not be the only reason for reverting reforms. In practice, the approach is limited as there seem to be no data readily available.

Another proxy for ownership, which was used by Fund staff in the 2011 Review of Conditionality (IMF, 2012b), is the number of prior actions (PAs) at programme approval: a programme that does not “need” any PAs, or only a low number of them could be considered to reflect high ownership by the authorities. PAs were seen by Fund staff as a screening device used to ensure that the minimum necessary level of ownership is present for programme success. According to the IMF, a higher number of PAs at programme approval was associated with a lower implementation ratio of structural conditionality over the life of a programme, and the probability of a given review's including PAs was inversely related to the implementation record of previous reviews. However, as countries are not necessarily less willing or able to meet complex requirements, the number of PAs could also be seen from a different perspective: a high number of PAs could also reflect the authorities' commitment to reform and thus their ownership.

Beyond the number of conditions, a time aspect might also be a useful proxy: the time it took to negotiate a programme or the delay of reviews could provide an indication of the ownership of national authorities. The limitations of this approach are similar to those mentioned above: ownership is not the only factor influencing the length of programme negotiations or reviews and data are not readily available.

Finally, indicators of political stability, political cohesion or popular support could provide information on how broadly the commitment is anchored across the various national authorities. An analysis of the various available country indicators is beyond the scope of this report.

Box 6

Measuring the success of GRA-funded programmes

The success of GRA-funded arrangements ultimately hinges on their ability to achieve the two statutory objectives of Fund lending, namely: (a) solving countries' b.o.p. problems during the programme period and (b) helping achieve medium-term external viability after programme completion. In its paper (IMF, 2019), the Fund proposed gauging the attainment of these objectives by considering, respectively, the nature of post-programme engagement and the evolution of certain "vulnerability indicators" produced internally by staff.

As regards post-programme engagement, the IMF distinguishes between two types of b.o.p. situations. In positive Type I b.o.p. situations, the country's b.o.p. problems would be substantially resolved with just one programme – in turn, this would require either no further arrangements, or successor programmes of a precautionary (i.e., non-drawing) nature, or purely "signalling" technical assistance arrangements such as the Policy Coordination Instruments or "low access" successor programmes (i.e. below a certain threshold relative to quotas).⁴⁸ Conversely, in negative Type II b.o.p. situations, the country's b.o.p. problems would continue unabated across two or more consecutive arrangements. These latter situations would therefore include all programmes that are followed by further drawing arrangements of "high access" size, i.e. above the threshold mentioned earlier.

On the other hand, medium-term external viability is measured by the country ratings prepared by staff in the context of their internal "Vulnerability Exercises" (Ahuia et al., 2017). These exercises encompass a wide range of macroeconomic and financial indicators and rely heavily on the judgement of country teams. The final overall ratings have only three levels of vulnerability ("high", "medium" and "low"); by definition, then, reductions in vulnerability ratings (from high to medium or low, or from medium to low) would identify programmes that can successfully restore medium-term viability.

The features of post-programme engagement and the findings on vulnerability are then combined to determine programme success, with the help of a "transition matrix" describing the changes in vulnerability ratings before and after the programmes:

		Vulnerability <i>after</i> program			
		High	Medium	Low	
BOP Situations of Type I	+ Vulnerability <i>before</i> program	High	Yellow	Green	Type of program Green = successful Yellow = partially successful Red = unsuccessful
		Medium	Red	Yellow	
		Low	Red	Green	
BOP Situations of Type II	+ Vulnerability <i>before</i> program	High	Red	Yellow	
		Medium	Red	Yellow	
		Low	Red	Yellow	

Based on the proposed metrics, 32% of GRA-funded programmes approved in the 2011-17 period would be assessed as successful, 43% as partly successful and 25% as unsuccessful. The IMF also finds that this measure of success is positively associated with programme completion

⁴⁸ In particular, "low access" drawing programmes are defined as programmes with annualised access of less than one-quarter of the annual exceptional access threshold. Based on this definition, "high access" drawing programmes would include a good proportion of Fund arrangements whose financial size is below the normal access limits in cumulated terms.

(about 60% of unsuccessful programmes went irretrievably off-track) and with cases in which programme design also included some form of sovereign debt relief.

All such findings crucially depend on the judgemental elements embedded in vulnerability ratings. The results are also influenced by whether successor programmes are of a drawing type and, if so, by whether their size is above the threshold used to identify “low access” arrangements. Thus, the choice of this latter threshold (which is unavoidably arbitrary) also plays an important role in determining whether a Fund programme qualifies as a “successful” one or not.

Box 7

The Greek adjustment programmes and IMF conditionality

Greece signed three adjustment programmes in 2010, 2012 and 2015, with joint conditionality by the European institutions and the IMF. In line with most programmes, the IMF’s broad

objectives were to restore competitiveness and growth, fiscal sustainability and, later, financial stability. Conditionality largely focused on comprehensive monitoring of fiscal performance and, in the absence of the ability to use devaluation to boost competitiveness, on internal devaluation (wage cuts). Structural reforms were initially confined to macro-critical reforms, including modernising the public administration, streamlining the local authorities, improving the budgetary framework and data reporting, reforming social security, reducing risks from state-owned enterprises and enhancing tax administration. Over time, however, structural conditionality became less parsimonious, as it was largely driven by extensive EU conditionality (IMF, 2012c), and less focused on core Fund competencies.

It is difficult to isolate and assess the success of the IMF intervention so shortly after the official completion of the programme. Flow imbalances, the public sector and current account deficits have been largely eliminated. However, the initial imbalances and the programmes which tried to address them had a severe impact in terms of economic and social costs. GDP declined by around one-quarter, while growth outcomes fell short of initial projections throughout the programmes, hinting at possible miscalculations. Moreover, stock imbalances remain. In 2009, the debt-to-GDP ratio stood at around 127%; by 2017, it had risen to almost 180%, in spite of private debt being cut by 50%. Unemployment is still extremely high, although it has fallen from a peak of 27.5% to 18.9%. Finally, non-performing loans have risen sharply and, though falling, still account for around 47% of banks’ total assets.

Achievement of quantitative fiscal targets was generally strong. Similarly, the current account deficit declined, initially due to a sharp contraction in imports and latterly to strong export performance. Structural conditionality, however, displayed lower implementation rates, burdened by the large number of reforms, the weak administrative capacity, strong resistance by vested interests and gradual reform fatigue. Additionally, the cuts in Greek debt, designed to help debt sustainability, compromised financial stability, warranting new measures and additional financial assistance.

The macroeconomic assumptions were overly optimistic⁴⁹, underestimating the recessionary effects of demand-contractionary policies (e.g. the size of fiscal multipliers, the effect of credit shrinkage on the financing of the real economy and investment, and the impact of wage and pension cuts). In addition, the assumptions regarding the growth payoff of structural reforms could have been more conservative, since it takes time for structural reforms to bear fruit. One

⁴⁹ This is not uncommon (Musso and Phillips, 2002; Baqir et al., 2005).

example of the implications of getting growth projections wrong is in the context of debt dynamics, where IMF-supported programmes predicted much lower debt-to-GDP ratios than have actually been achieved.⁵⁰

The appropriateness of the sequence of structural reforms (with labour market reforms preceding reforms in the product market⁵¹ and in institutional capacity and governance) has been widely debated, along with the effectiveness of the large number of conditions and their prioritisation. The Greek programmes illustrate that a few, well-targeted conditions have a positive impact on performance, while too many or too intrusive conditions may hinder it (Collier et al., 1997; Goldstein, 2000).

The political economy of adjustment also posed challenges, for instance in fighting tax evasion and developing targeted social safety nets to achieve a more equitable distribution of adjustment costs and make conditionality more acceptable. Political consensus ensures a greater chance of success, since groups bearing the costs feel their sacrifice is recognised and that they participate in programme formulation (Killick et al., 1986). The European experience has shown that countries with a greater degree of consensus adjust more easily.

Political will affects performance (Przeworski and Vreeland, 2000), but often political or social upheavals make governments unable to make credible commitments (Dreher, 2004). Greece's highly-demanding and reform-dense adjustment programmes required strong ownership by definition. However, compliance with conditionality and programme implementation in practice was complicated and adversely affected by strong vested interests, inefficient bureaucracy, less political stability and lack of political cohesion.

There are also lessons for Fund collaboration with monetary unions and their regional financing arrangements in programme design. Cooperation agreements could cover information-sharing, the reconciliation of technical analysis, the division of labour in terms of design and monitoring, communication strategies and the existence of union-wide policies. In a currency union, political economy issues are more complex, including differences in mandates and systemic and contagion risk considerations.

In sum, the Greek case shows that apart from the design of the programme, political circumstances and the expected payoffs of conditionality matter for outcomes. The growth effects of the conditions applied were overestimated, implying that the drop in output was considerably underestimated, and the negative effects on public welfare and ultimately on support for reform, were underestimated. Focused conditionality, improved communication, increased transparency and attention to macro-social implications could have raised public awareness and acceptance. Although meeting intermediate policy targets is often considered the key parameter for evaluating success, the programme's impact on the economy and on social welfare in the long run still remains to be seen.

⁵⁰ See, for example, Baqir et al. (2005) and Helbling et al. (2004).

⁵¹ The lack of emphasis on product market reforms led to falls in unit labour costs not passing through to price competitiveness.

Box 8

Case Study Pakistan

Over the last decade, Pakistan's economy has been marked by repeated boom-bust cycles, accompanied by uneven implementation of policies and reforms. Pakistan has a long history of IMF-supported programmes (18 since 1958) and has been almost continuously under a Fund arrangement since the early 1990s. The last programme (EFF) which ended in 2016 was one of the very few that was entirely completed and did not go off-track after some time. In terms of size, the EFF was Pakistan's second largest programme with access to Fund resources of SDR 4.4 billion (USD 6.8 billion; 245% of quota).

Looking at the overall figures, the implementation of the last EFF could be assessed as relatively satisfactory. Having met 57 out of the 72 quantitative performance criteria (QPCs) and 15 out of the 23 indicative targets (ITs), the authorities complied with the majority of quantitative programme targets. On the structural side, 43 structural benchmarks (SBs) were met while only two were missed. However, the overall figures mask the fact that important QPCs were repeatedly adjusted downwards, particularly during the early phase of the programme. In addition, an important IT on the collection of tax revenues – which was introduced at the combined fifth and sixth review to facilitate improvements in this crucial area – was only met once in the seven programme reviews that followed. Furthermore, test dates for structural benchmarks that were critical for lasting programme success, such as those related to central bank independence or privatisation, were repeatedly postponed and in the latter case SBs were sometimes dropped entirely as a required condition.

Turning to macroeconomic outcomes, at first glance the last programme also appears to have been quite successful. As the table shows, the current account deficit almost halved and stabilised thereafter, reserve buffers were rebuilt, the fiscal balance improved significantly and GDP growth recovered. Inflation also came back to single-digit levels. However, immediately after the programme period (i.e. T+4), the current account deficit widened considerably and reserve buffers started to be depleted. As illustrated in the chart, this development should not really come as a surprise. Almost all of the previous adjustment in the current account came from lower imports as a result of the slump in oil prices at the beginning of 2015. Exports as a percentage of GDP instead continued to decline since the year of programme approval. The oil price shock also had a positive effect on overall macroeconomic conditions and made it easier to achieve the quantitative targets set by the IMF programme. In fact, the oil price shock coincided almost perfectly with a marked improvement in programme compliance with the quantitative targets. At the same time, low oil prices might have alleviated the immediate pressure on the authorities to implement politically difficult decisions and undertake bold structural reforms necessary to end the familiar boom-bust cycle of Pakistan's economy.

Developments since the end of the last programme have made it painfully clear that long-standing structural problems persist and have not been addressed satisfactorily by the programme. As also stressed by IMF staff in the first post-programme monitoring report, operational independence of the State Bank of Pakistan has not been sufficiently established. Similarly, progress in privatising loss-making state-owned enterprises has been limited. In addition, the authorities failed to seriously reform the tax system and broaden the tax base. Tax revenues as a percentage of GDP are still very low and have barely increased since 1990, resulting in sustained high gross (external) financing requirements. Pakistan continues to rank poorly for the quality of institutions and the business environment. Power sector performance remains weak with frequent line losses and theft. Most of these issues continue to place a direct or indirect strain on the external balance.

The case of Pakistan demonstrates that the IMF programme achieved macroeconomic stabilisation during an immediate b.o.p. crisis. However, imbalances quickly re-emerged. The long history of prolonged use of Fund resources suggests that a sustained adjustment will remain elusive in the absence of the necessary political ownership to implement reforms to seriously address Pakistan's deep-rooted structural challenges.

Table A

Macroeconomic outcomes before and after the EFF-arrangement

(T=2013)

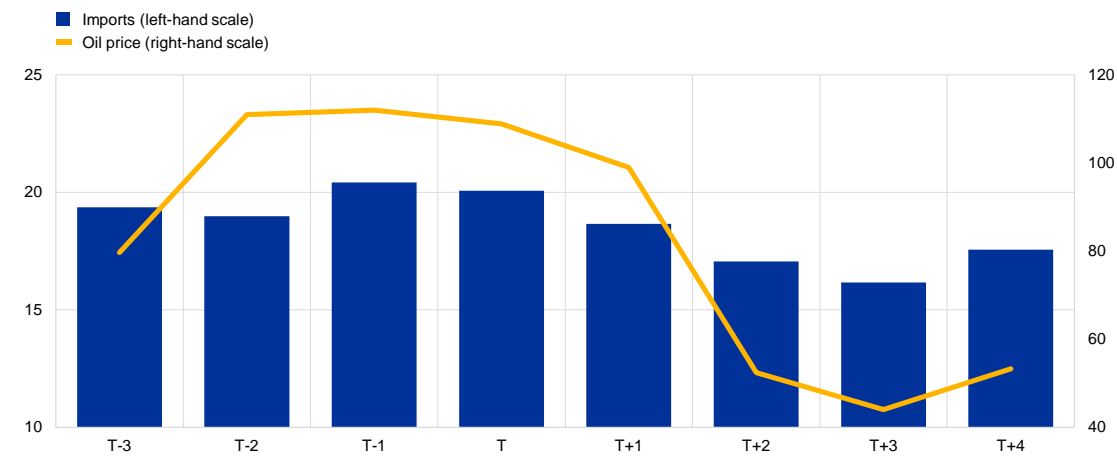
	T-3	T-2	T-1	T	T+1	T+2	T+3	T+4
GDP growth (%)	2.6	3.6	3.8	3.7	4.1	4.1	4.6	5.4
Public debt (%GDP)	60.6	58.9	63.2	63.9	63.5	63.3	67.6	67
Primary balance (%GDP)	-1.7	-2.9	-4.2	-3.9	-0.3	-0.5	-0.1	-1.4
Inflation (period average)	10.1	13.7	11	7.4	8.6	4.5	2.9	4.1
Reserves (months of import)	4.7	4.2	3.1	1.7	3.1	4.4	4.6	3.2
Current account (%GDP)	-2.2	0.1	-2.1	-1.1	-1.3	-1	-1.7	-4.1
Exports (%GDP)	13.5	14	12.4	13.3	12.2	10.6	9.1	8.2
Imports (%GDP)	19.4	19	20.4	20.1	18.7	17.1	16.2	17.6

Source: IMF October 2018 WEO database, World Development Indicators.

Chart A

Imports and oil prices before and after the EFF arrangement

(T = 2013; y-axis: left-hand scale: imports of goods and services (as percentage of GDP); right-hand scale: oil price (USD per barrel))



Source: World Development Indicators, FRED database.

5 Lessons, policy considerations and open issues

The 2018 ROC provides an important opportunity to analyse whether IMF lending is adequately oriented to achieve its statutory objectives, including by addressing the measurement of key concepts such as the depth of conditionality, the degree of national ownership, and programme success. This report provides information and analysis that was intended to help European authorities to forge their positions on these matters.

The available studies on the impact of Fund lending suggest that, as a result of IMF programmes, countries' external and fiscal balances generally improve, but outcomes in terms of growth and net capital inflows remain somewhat mixed. In this respect, country fundamentals do matter in determining the effects of IMF programmes, as shown by the fact that, after the global financial crisis, worsening country fundamentals entailed larger and longer programmes and more difficult structural challenges, and were thus associated with a higher probability of non-compliance and programme failure. The findings in this report are broadly in line with the literature. In the aftermath of an IMF programme, all relevant macroeconomic variables tend to improve in comparison with the pre-programme period; in particular, external and fiscal positions improve considerably and growth typically rebounds, inflation declines and net private capital inflows stabilise or recover slightly. However, the improvement has generally fallen short of expectations, especially in terms of GDP growth and debt reduction.

The analysis in the report shows that, during the period reviewed (2008-18), the characteristics of IMF programmes evolved with the macroeconomic context; in addition, a clear trend towards more structural conditionality and longer programme implementation horizons surfaced. The first years after the global financial crisis (2008-12) saw a much larger number of EXA programmes, required by countries with large imbalances and with an urgent need to stabilise their economy, which translated into a higher weight of macro conditionality. However, going beyond the specific financing needs of this particular period, and against a background of increasing global interconnectedness and economic complexity, programmes approved after 2012 have returned to include more structural conditionality while implementation horizons have lengthened, as illustrated by the increasing use of EFFs relative to standard SBAs.

The 2018 ROC also touched upon the possible lengthening of IMF programmes and the associated repayment schedules.⁵² This opens up several important questions. The length of programmes might be flexibly designed in order to allow more space for authorities' decisions and more time for policies to have economic impact. On the other hand, longer EFF-funded programmes also have potential

⁵² As requested by several country authorities that responded to a questionnaire circulated by the Fund last year.

downsides, some of which had already been discussed in the past (e.g. the risks of reform fatigue and delaying needed adjustments or raising programme implementation risks by extending beyond electoral cycles). Moreover, since an extension of the EFF to four years was made possible, very few programmes that were approved for/extended to four years have completed all the reviews and disbursed the originally agreed amount. Would this situation be different if even longer programmes were allowed by the Fund? What would this mean for the success of programmes and the IMF's reputation? As epitomised by the experience with Pakistan, when the Fund engaged in a long-term relationship with borrowing members, including many successor arrangements, it could only obtain limited success. Finally, any extension in the maximum period for repaying Fund disbursements (equal to five years according to the AOA) would legally require a qualified majority decision by its Executive Board (85% of total voting power), which may be difficult to achieve.

Perhaps one of the most prominent questions addressed in the 2018 ROC is the measurement of the success of Fund programmes. As explained in this report, the staff proposes to measure the success of GRA-funded programmes on the basis of two components linked to the statutory objectives of all IMF programmes: solving countries' b.o.p. problems and restoring sustainable growth and external viability in the medium term. The Fund obtains mixed results from this exercise in terms of programme success: 32% of the programmes would be successful (both targets achieved), 43% partially successful (one target achieved) and 25% unsuccessful (none achieved).

The indicator of programme success proposed by the IMF has some shortcomings. In particular, the basis for the assumptions about the persistence of b.o.p. needs across different programmes is unclear, as is the basis for the value judgements on countries' vulnerabilities reached internally by the staff. The sensitivity of the indicator of programme success to those assumptions, combined with the key role played by judgemental elements, would advise caution before drawing firm policy conclusions. Thus, further investigations on how to better design the criteria for measuring programme success appear warranted at this juncture.

Despite these problems, the analytical strategy proposed by the IMF for measuring programme success is a step in the right direction. This report's preliminary analysis of "serial borrowing" – using the Fund's criteria to distinguish successor arrangements associated with persisting b.o.p. imbalances from the remaining successor programmes – seems to lead to relevant policy conclusions, and therefore implicitly provides some support for the Fund's proposed strategy. In particular, the persistence of b.o.p. imbalances across different programmes is strongly associated with a worse programme performance over a variety of dimensions (conditionality compliance rates, programme completion rates, economic growth, capital flows, fiscal imbalances and debt levels). Given the relatively frequent occurrence of cases with persistent external imbalances, these findings pose important policy questions that require an appropriately structured response.

The discussion on programme success is linked to other specific issues related to programme design and conditionality and how they contribute to

more effective IMF lending. The 2018 ROC focuses on some of these issues, such as the observation of a recently stronger move towards more structural conditionality and longer programmes (discussed earlier in this section), the quality of fiscal conditionality, ownership and parsimony, or the impact of debt restructuring on programme success. While the five principles for conditionality (see Section 3.2) remain valid, more work needs to be done in particular on principle 1 (ownership) and principle 2 (parsimony).

Given the complexity of implementing structural conditionality, the phasing of the conditions has become a major aspect of programme design, an aspect that has to be coupled with parsimony. The empirical studies reviewed in this report⁵³ have found negative correlation between the number of conditions and meeting policy targets. The Fund's own research has also found that the depth of conditions is inversely related to the number of conditions (cf. footnote 33) and that a high number of conditions is more likely to erode ownership. Better design of structural conditionality and, in principle, more parsimony are critically needed to ensure adequate prioritisation of policies and reduce uncertainty with regard to the capacity of the programme country to implement the measures effectively. Nevertheless, the relative importance of the depth and parsimony of conditionality has to be more convincingly analysed, including the need to adequately sequence structural reforms in order to achieve success. In addition, programmes need to take into account the fact that countries which are members of a currency union do not have exchange rate policies as an available tool and might need more structural reforms than others. More analytical work is also warranted to make assumptions more realistic and reduce the repercussions of projection errors on policy design.

Another link to be studied further is the relationship between the number of conditions and ownership. Ownership is key for programme success and needs to be improved. Social acceptance of programme conditionality can be enhanced by transparency, communication and fair distribution of adjustment costs and appropriate safeguarding of social policies (linked to the ongoing work on the strategic framework on social spending). Policies to smooth the social costs of macroeconomic adjustment appear to have been incorporated more strongly into IMF programmes only recently. Better consideration of these aspects in programme design might help increase social acceptance, ownership and ultimately the success of programmes. Tackling the perception of stigma through engagement and better communication is another important aspect. Market access and private capital flows are also highly affected by credibility and confidence, which is built not just by signing off on an IMF programme but by successfully implementing it.

Fiscal matters – namely, the quality of fiscal conditionality and the role of debt restructuring – also figure prominently in the 2018 ROC. Regarding the quality of fiscal conditionality, the empirical literature reviewed in this report points to the fact that to be sustainable, fiscal adjustment has to go beyond short-term measures and address the fiscal vulnerabilities of programme countries, on both the expenditure and the taxation sides. There is plenty of evidence that fiscal consolidation focused

⁵³ In particular, those studies isolating the impact of IMF conditionality on policy targets and macroeconomic objectives; see Section 4.1 (p. 26).

on public investment and some types of social expenditure alone might deliver the required results in the short term but need to be followed up by structural fiscal consolidation to support growth potential and secure long-term fiscal sustainability. The second fiscal aspect of relevance is the role of debt restructuring – or of debt reprofiling – in ensuring the success of Fund programmes. The Fund's concern is rooted in the idea that debt treatment often comes “too little, too late”, perhaps due to problems of perceived stigma. However, caution against a general strategy on this issue is of the essence; a case-by-case approach consistent with established IMF rules and frameworks should continue to be preferred. In any event, debt treatment cannot be viewed as a silver bullet for resolving countries' deep rooted structural flaws. In particular, the relief offered by debt restructuring would only be ephemeral if it were not combined with determined policy strategies to address the underlying long-term problems.

There are other aspects of the current ROC exercise that have not been examined in this report, such as evenhandedness or the effectiveness of PRGT-funded programmes, as some prioritisation was necessary.

Finally, it should be underlined that the analysis of conditionality would greatly benefit from improved data. As discussed in Section 4.2, the MONA dataset has a number of drawbacks and could be improved by filling in the gaps and ensuring consistency in terms of number of conditions, their description and classification. Information on structural conditions could also be complemented by an indicator of the “depth” of these conditions (which is calculated by the Fund's staff, but not made public). The treatment of conditions of interrupted or cancelled programmes should also be clarified. The Fund's commitment to improve this database and make it more effective and user-friendly is welcome.

References

- Alesina, Alberto, Omar Barbiero, Carlo Favero, Francesco Giavazzi and Matteo Pradisi (2015), "The Composition of Fiscal Adjustments: new evidence", Paper prepared for ECFIN workshop on Expenditure based consolidation.
- Alesina, Alberto and Roberto Perotti (1996), "Fiscal adjustments in OECD Countries: composition and macroeconomic effects", *NBER Working Paper*, 5730.
- Andone, Irina and Beatrice Scheubel (2019), "Once bitten: new evidence on the link between IMF conditionality and IMF stigma", *Working Paper Series*, No 2262, ECB.
- Arabaci, Mehmet C. and Sencer Ecer (2014), "The International Monetary Fund (IMF) and the catalytic effect: Do IMF agreements improve access of emerging economies to international financial markets?", *The World Economy*, 2014.
- Atoyan, Ruben, and Patrick Conway (2006), "Evaluating the impact of IMF programs: A comparison of matching and instrumental-variable estimators", *The Review of International Organizations*, 1 (2), pp. 99–124.
- Babb, Sarah L., and Ariel Buira (2005), "Mission Creep, Mission Push and Discretion: The Case of IMF Conditionality", in Buira, Ariel (ed.), *The IMF and the World Bank at Sixty*, Anthem Press, London, pp. 59-83.
- Bagci, Pinar, and W. Perraudin (1997), "Do IMF Programs Work?", *Global Economic Institutions Working Paper*.
- Baqir, Reza, Rodney Ramcharan, and Ratna Sahay (2005), "IMF Programs and growth: is optimism defensible?", *IMF Staff Papers*, 52/2.
- Barro, Robert J., and Jong-Wha Lee (2005), "IMF Programs: Who is Chosen and What Are the Effects?", *Journal of Monetary Economics*, Vol. 52, pp. 1245-1269.
- Bauer, Molly E., Cruz, C. and Graham, B. T. (2012). "Democracies only: When do IMF agreements serve as a seal of approval?", *The Review of International Organizations*, Vol. 7, Issue 1, pp 33-58.
- Benelli, Roberto (2003), "Do IMF-Supported Programs Boost Private Capital Inflows? The Role of Program Size and Policy Adjustment", *IMF Working Paper*, WP/03/231.
- Best, Jaqueline (2012), "Ambiguity and Uncertainty in International Organizations: A History of Debating IMF Conditionality", *International Studies Quarterly*, Vol. 56, No 4, pp. 674-688.
- Bird, Graham and Rowlands, D. (2008), "Catalysing private capital flows and IMF programs: some remaining questions", *Journal of Economic Policy Reform*, Vol. 11, No 1, pp. 37–43.

Bird, Graham (2001), "IMF Programs: Do They Work? Can They be Made to Work Better?", *World Development*, Vol. 29(11), pp. 1849-1865.

Bird, Graham (2002), "The Completion Rate of IMF Programmes: What We Know, Don't Know and Need to Know", *The World Economy*, vol. 25(6), p. 833-847, June.

Blanton, Robert G., Bryan Early, and Dursun Peksen (2018), "Out of the shadows or into the dark? Economic openness, IMF programs, and the growth of shadow economies", *The Review of International Organizations*, 13(2), pp. 309-333.

Boughton, James, and Alex Mourmouras (2002), "Is Policy Ownership an Operational Concept?", *IMF Working Paper*, No WP/02/72.

Buira, Ariel (2003), "An Analysis of IMF conditionality", Department of Economics, University of Oxford, *Discussion Paper Series*, No 104.

Bulir, Ales, and Soojin Moon (2003), "Do IMF-Supported Programs Help Make Fiscal Adjustment More Durable?", *IMF Working Paper*, No. WP/03/38.

Carnot, Nicolas (2013), "The composition of fiscal adjustments: some principles", *ECFIN Economic Briefs*, Issue 23, April.

Carrière-Swallow Yan, Antonio David and Daniel Leigh (2018), "The macroeconomic effects of fiscal consolidation in emerging economies. Evidence from Latin America", *IMF Working Paper*, No. 18/142.

Cho, Hye Jee (2009), "Do IMF Programs Discipline Budget Deficit? The Effects of IMF Programs on Government Budget Balance, Expenditure, and Revenue" *The Korean Journal of International Relations*, Vol. 49(6), pp. 7-33.

Collier Paul, Patrick Guillaumont and Sylviane Guillaumont (1997), "Redesigning Conditionality", *World Development* 25 (9), pp. 1399–1407.

Connors, T. (1979), "The Apparent Effects of Recent IMF Stabilization Programs", *International Finance Discussion Paper*, No 135, Board of Governors of Federal Reserve System.

Conway, Patrick (1994), "IMF Lending Programs: Participation and Impact", *Journal of Development Economics*, 45, pp. 365-391.

Corsetti, Giancarlo, Bernardo Guimaraes and Nouriel Roubini (2006), "International lending of last resort and moral hazard: A model of IMF's catalytic finance", *Journal of Monetary Economics*, 53, pp. 441-471.

Cottarelli, Carlo, and Curzio Giannini (2002), "Bedfellows, hostages, or perfect strangers? Global capital markets and the catalytic effect of IMF crisis lending", *IMF Working Paper*, WP/02/1193.

Crivelli, Ernesto and Sanjeev Gupta (2014), "Does Conditionality in IMF-Supported Programs Promote Revenue Reform?", *IMF Working Paper*, WP/14/206.

Crivelli, Ernesto and Sanjeev Gupta (2016), "Does conditionality in IMF-supported programs promote revenue reform?", *International Tax and Public Finance*, 23, pp. 550-579.

Dell, Sidney (1981), "On Being Grandmotherly: The Evolution of IMF Conditionality", *Essays in International Finance*, Princeton University, No 144.

Dickes-Mireaux, Louis, Mauro Mecagni, and Susan Schadler (2000), "Evaluating the effect of IMF lending to low-income countries," *Journal of Development Economics*, Vol. 61, pp. 495- 526.

Dreher, Axel (2004), "IMF and Economic Growth: The Effects of Programs, Loans, and Compliance with Conditionality", Thurgauer Wirtschaftsinstitut, *Research Paper Series*, No 1, November.

Dreher, Axel (2006), "IMF Conditionality: Theory and Evidence", Paper prepared for the Independent Evaluation Office report.

Dreher, Axel and Roland Vaubel (2004), "The Causes and Consequences of IMF Conditionality", *Emerging Markets Finance and Trade* 40(3), pp. 26-54.

Edwards, Martin S. (2000), Re-evaluating the catalytic effect of IMF programs, Rutgers University, mimeo.

Edwards, Martin S. (2006), "Signalling credibility? The IMF and catalytic finance", *Journal of International Relations and Development*, Vol. 9, pp. 27–52.

Eldar, Ofer (2005), "Reform of IMF conditionality. A proposal for self-imposed conditionality", Institute for International Law and Justice, *Working Paper*, No 2005/11, Global Administrative Law Series.

ESM (2012a), [Treaty establishing the European Stability Mechanism](#), T/ESM 2012-LT/en.

ESM (2012b), [Guidelines on Loans](#), October 9.

ESM (2012c), [Guideline on precautionary financial assistance](#), October 9.

ESM (2012d), [General Terms for ESM Financial Assistance Facility Agreements](#), November 22.

ESM (2012e), [Standard Facility Specific Terms for ESM Financial Assistance Facility Agreements](#), November 22.

ESM (2012f), [ESM Template Financial Assistance Facility Agreements](#), November 22.

ESM (2014), [ESM pricing policy](#), December 8.

ESM (2018a), [Memorandum of understanding on the working relations between the Commission and the European Stability Mechanism](#), April 27.

ESM (2018b), [Joint position on future cooperation between the European Commission and the ESM](#).

Feldstein, Martin S. (2002), "Economic and Financial Crises in Emerging Market Economies: Overview of Prevention and Management", *NBER Working Paper*, No 8837, March.

Fidrmuc, Jan, and Stefani Kostagianni (2015), "Impact of IMF Assistance on Economic Growth Revisited", *Economics and Sociology*, Vol. 8(3), pp. 32-40.

Garuda, Gopal (2000), "The distributional effects of IMF programs: a cross-country analysis", *World Development*, Vol. 28, pp. 1031-1051.

Gold, Joseph (1979), *Conditionality*, *IMF Pamphlet Series*, No 31.

Goldstein, M. (2000), "IMF Structural Conditionality: How Much Is Too Much?", *Economic and Financial Crises in Emerging Market Economies*, National Bureau of Economic Research (NBER), Woodstock, October.

Goldstein, Morris, and Peter Montiel (1986), "Evaluating Fund stabilization programs with multicountry data: some methodological pitfalls", *IMF Staff Papers*, No 33, pp. 304-344.

Cheng, Gong (2018), Reflections on the development of regional financing arrangements: experience from Europe, mimeo.

Guerson, Alejandro (2013), The Composition of Fiscal Consolidation Matters: policy simulations for Hungary, *IMF Working Paper*, WP/13/207.

Guitian, Manuel (1981), Fund Conditionality. Evolution of Principles and Practices, *IMF Pamphlet Series*, No 38.

Gupta, Sanjeev (2018), "What Have We Learned from Expenditure Conditionality in IMF Programs?", *Center for Global Development*.

Gupta, Sanjeev, Benedict Clements, Emanuele Baldacci and Carlos Mulas-Granados (2005), "Fiscal policy, expenditure composition, and growth in low-income countries", *Journal of International Money and Finance*, Vol. 24, pp. 441-463.

Gutt, Camille (1947): Circular Letter to All Members (June 7, 1947), in Horsefield, J. K., *The International Monetary Fund 1945 – 1965*, Vol. III (1969), pp. 307ff.

Gylfason, Thorvaldur (1987), "Credit Policy and economic activity in developing countries with IMF stabilisation programs", *Princeton Studies in International Finance*, Vol. 60.

Haque, Nadeem Ul, and Mohsin S. Khan (1998), "Do IMF-Supported Programs Work? A Survey of the Cross-Country Empirical Evidence", *IMF Working Paper*, No 98/169.

Hajivassiliou, Vassilis A. (1987), "The External Debt Repayments Problems of LDCs: An Econometric Model Based on Panel Data", *Journal of Econometrics*, Vol. 36, pp. 205–30.

Helbling, Thomas., Ashoka Mody and Ratna Sahay (2004), "Debt Accumulation in the CIS-7 Countries: Bad Luck, Bad Policies, or Bad Advice", *IMF Working Paper*, No 04/93.

Hoddie, Matthew, and Caroline A. Hartzell (2014) "Short-term pain, long-term gain? The effects of IMF economic reform programs on public health", *Social Science Quarterly* 95 (4), pp. 1022-1042.

Horsefield, J. Keith (ed.) (1969), "The International Monetary Fund 1945-1965", Vols. 2 and 3, Washington, International Monetary Fund, 1969.

Hutchison, Michael M. (2001), "A Cure Worse Than the Disease? Currency Crises and the Output Costs of IMF-Supported Stabilization Programs", *NBER Working Paper*, No 8305.

Hutchison, Michael M. (2004), "Selection Bias and the Output Costs of IMF Programs", *EPRU Working Paper Series*, No 2004-15.

Independent Evaluation Office (2003), "Fiscal Adjustment in IMF-Supported Programs", Washington D.C.

Independent Evaluation Office (2007), "Structural conditionality in IMF-supported programs", *Evaluation Report*, Washington D.C.

Independent Evaluation Office (2018), "Structural conditionality in IMF-supported programs", *Evaluation Update*, Washington D.C.:

International Monetary Fund (2019), "2018 Review of Program Design and Conditionality", May.

International Monetary Fund (2016), [Articles of Agreement of the International Monetary Fund](#), April.

International Monetary Fund (2012a), 2011 Review of Conditionality-Overview Paper, June 19.

International Monetary Fund (2012b), 2011 Review of Conditionality-Background Paper 1: Content and Application of Conditionality, June 18.

International Monetary Fund (2012c), 2011 Review of Conditionality-Background Paper 2: Design of Fund-Supported Programs, June 18.

International Monetary Fund (2012d), 2011 Review of Conditionality-Background Paper 3: Outcomes of Fund-Supported Programs, June 18.

International Monetary Fund (2006), Fiscal Adjustment for Stability and Growth, Fiscal Affairs Department.

International Monetary Fund (2005), Review of the 2002 Conditionality Guidelines.

International Monetary Fund (2002), Guidelines on conditionality, September. IMF Decision No I, IMF Washington D.C.

International Monetary Fund (2001), Conditionality in Fund-Supported Programs. Policy Issues.

International Monetary Fund (2000), Review of the Fund's strategy on overdue financial obligations, September 5.

IMF-World Bank (2017), "The 2017 Joint Review of the Standards and Codes Initiative", Washington DC, August.

Ito T. (2012), "Can Asia overcome the IMF Stigma?", *American Economic Review: Papers & Proceedings*, 102(3), pp. 198–202.

Jeanne, Olivier, Jonathan D Ostry and Jeromin Zettelmeyer (2008), "A Theory of International Crisis Lending and IMF Conditionality", *IMF Working Paper*, WP/08/236.

Jensen, Nathan M. (2004), "Crisis, Conditions, and Capital. The Effect of International Monetary Fund Agreements on Foreign Direct Investment Flows", *Journal of Conflict Resolution*, Vol. 48, No 2, pp. 194–210.

Johnson, Omotunde, and Joanne Salop (1980), "Distributional aspects of stabilization programs in developing countries", *IMF Staff Papers*, No 27, pp. 1-23.

Joyce, Joseph P and Ilan Noy (2008), "The IMF and the Liberalization of Capital Flows", *Review of International Economics*, Vol. 16, No 3, August, pp. 413-430.

Kenen, Peter B (2000) "Financial sector reform in EMEs. Getting the incentives right", Per Jacobsson Lecture.

Kentikelenis, Alexander E., Thomas H. Stubbs and Lawrence P. King (2016), "IMF conditionality and development policy space, 1985-2014", *Review of International Political Economy*, 2016.

Khan, Mohsin S. (1990), "The macroeconomic effects of Fund-supported adjustment programs", *IMF Staff Papers*, No 37, pp. 195-231.

Killick, Tony (1984), "The Quest for economic stabilization: the IMF and the Third World", NY: St Martin's Press, New York.

Killick, Tony (1995), "IMF Programs in Developing Countries: Design and Impact", Routledge, London.

Kutan, Ali M., Gulnur Muradoglu, and Brasukra G. Sudjana (2012), "IMF programs, financial and real sector performance, and the Asian crisis", *Journal of Banking & Finance*, 36, pp. 164-182.

- MacKenzie, G. A., David W. H. Orsmond and Philip R. Gerson (1997), "The composition of fiscal adjustment and growth: lessons from fiscal reforms in eight countries", *IMF Occasional Paper*, No 149.
- Martha, Rutsel Silvestre J. (1990), "Preferred Creditor Status under International Law: the Case of the International Monetary Fund", *The International and Comparative Law Quarterly*, Vol. 39, No 4, pp. 801-826.
- Meltzer, Allan H. (1998), "What's wrong with the IMF? What would be better?", in *Asian: An Analysis on Financial Crisis*, Federal Reserve Bank of Chicago, October.
- Mody, Ashoka, and Diego Saravia (2003), "Catalyzing Capital Flows: Do IMF-Supported Programs Work as Commitment Devices?", *IMF Working Paper*, WP/03/100, May.
- Morris, Stephen, and Hyun Song Shin (2006), "Catalytic finance: When does it work?", *Journal of International Economics* 70, pp. 161– 177.
- Mussa, Michael, and Miguel Savastano (1999), "The IMF Approach to Economic Stabilisation", *IMF Working Paper*, WP/99/104.
- Musso, Alberto. and Steven Phillips (2002), "Comparing Projections and Outcomes of IMF-Supported Programs", *IMF Staff Papers*, Vol. 49, No 1, April.
- Oliver, Robert W. (1985), "Bretton Woods: A Retrospective Essay, the California Seminar on International Security and Foreign Policy", June 1985, p. 41.
- Pastor, Manuel (1987), "The International Monetary Fund and Latin America: economic stabilization and Class Conflict", Boulder: Westview Press.
- Przeworski, Adam, and James Raymond Vreeland (2000), "The effect of IMF programs on economic growth," *Journal of Development Economics* 62, pp. 385-421.
- Reichmann, Tomas, and Richard Stillson (1978), "Experience with programs of balance of payments adjustment: stand-by arrangements in the highest tranches, 1963–72," *IMF Staff Papers*, No 25.
- Rickard, Stephanie and Teri L. Caraway (2018), "International demands for austerity: examining the impact of the IMF on the public sector", *Review of International Organizations*, pp. 1559-7431.
- Rodrik, Dani (1995), "Why is there multilateral lending?" *DEPR Discussion Papers*, No 1207.
- Scheubel, Beatrice, Andrea Tafuro and Benjamin Vonessen (2018), "Stigma? What stigma? A contribution to the debate on the effectiveness of IMF lending", *Working Paper Series*, No 2198, ECB.
- Scheubel, Beatrice and Livio Stracca (2016), "What do we know about the global financial safety net? Rationale, data and possible evolution", *Occasional Paper Series*, No 177, ECB.

Sisson, C.A. (1986), "Fund-supported programs and income distribution in LDCs", *Finance and Development*, 23, pp. 30-32.

Takagi, S., De Resende, C., Prieur, J., Loyola, F. and Nguyen, Y. (2014), "A Review of Crisis Management Programs Supported by IMF Stand-By Arrangements, 2008–11", *Background Paper*, No 14/12, IEO.

Tanzi, Vito, and Hamid Davoodi (1998), "Roads to Nowhere: How Corruption in Public Investment Hurts Growth" *IMF Economic Issues*, Vol. 12.

Tirole, Jean (2002), "Financial Crises, Liquidity, and the International Monetary System", Princeton University Press.

Tumpel-Gugerell, Gertrude (2017), "EFSF/ESM Financial Assistance Evaluation Report", European Stability Mechanism, June.

Van der Veer, Koen, and Eelke de Jong (2010), *IMF-Supported Programs: stimulating capital to solvent countries*, DNB Working Paper, No 244-2010.

Williamson, John (2000), "A more focused IMF", Peterson Institute for International Economics (PIIE), Washington DC, September.

Annex 1: Tables and charts

Table A.1
GRA-supported programmes

(2008-18)

Period covered	2008-2018		
		% in total sample	% in total GRA resources*
Total n° of arrangements	73	100.0	100.0
SBA (incl. blended)	49	67.1	60.5
<i>SBA Precautionary</i>	15	20.5	4.8
EFF (incl.blended)	24	32.9	39.5
Euro area (EA) programs	5	6.8	37.0
Exceptional Access	19	26.0	81.2
Off-track programs	24	32.9	42.7
Programs involving debt restructuring	14	19.2	30.3
Single	29	39.7	46.3
Followed by a successor	17	23.3	23.8
Successor	27	37.0	29.9
Total n° of countries	41	100.0	
Countries with more than one program	20	48.8	
EA Countries	4	9.8	
Non-EA countries	37	90.2	

Notes: * Weight of each category in the total GRA resources committed over 2008-2018. See Section 4.2.1 for definitions of programme types.

Table A.2
GRA-supported programmes

(by period)

Period covered	2002-2007			2008-2012			2013-2018		
		% total	% in total GRA resources*		% total	% in total GRA resources*		% total	% in total GRA resources*
Total n° of arrangements	36	100	100	42	100	100	31	100	100
SBA (incl. blended)	35	97.2	99.0	36	85.7	58.9	13	41.9	63.4
<i>SBA Precautionary</i>	19	52.8	8.2	9	21.4	4.0	6	19.4	6.1
EFF (incl.blended)	1	2.8	1.0	6	14.3	41.1	18	58.1	36.6
EA programs	0	0	0.0	4	9.5	56.7	1	3.2	1.0
Exceptional Access	4	11.1	82.6	15	35.7	90.1	4	12.9	65.1
Off-track programs	7	19.4	17.1	15	35.7	47.1	9	29.0	34.6
Programs involving debt restructuring	0	0	0.0	9	21.4	31.2	5	16.1	28.7

Note: See Section 4.2.1 for definitions of programme types.

Table A.3

Conditionality: number, type and policy area of conditions

(2008-18)

Sample	Average no. of conditions by completed review	Type of Condition (%total)					Policy Area (%total)			
		PA	QPC	SPC	SB	IT	Fiscal	Financial	Central Bank	Other
SBA	9.2	18.4	6.6	2.7	62.6	9.7	61.8	21.2	13.1	4.0
EFF	11.2	17.7	2.0	0.0	73.1	7.3	65.0	23.4	5.6	6.0
Precautionary	8.8	13.0	8.0	2.0	58.7	18.3	62.7	22.2	12.3	2.9
Non Precautionary	10.2	19.5	4.3	1.7	68.0	6.5	62.9	21.8	10.2	5.1
Euro Area	9.6	28.0	2.1	0.0	66.3	3.5	52.1	36.6	2.6	8.7
<i>EA Without Greece</i>	5.2	20.0	1.1	0.0	76.4	2.5	41.6	48.9	3.3	6.1
Non Euro Area	9.9	17.4	5.3	1.9	66.0	9.3	63.6	20.8	11.2	4.3
Exceptional Access	11.3	22.2	5.3	4.7	61.6	6.1	51.6	29.7	12.2	6.5
Normal Access	9.4	16.7	5.0	0.8	67.6	9.9	66.8	19.2	10.1	4.0
Debt Restructuring	11.1	20.4	4.5	2.9	64.4	7.9	67.7	18.6	9.1	4.6
Non Debt Restructuring	9.6	17.6	5.2	1.5	66.5	9.2	61.7	22.7	11.0	4.6
Single	7.6	17.5	3.9	1.1	69.8	7.7	54.4	27.9	12.7	5.0
Programs followed by "good" successors	6.2	14.7	5.5	4.2	61.9	13.7	69.1	18.0	8.6	4.2
Programs followed by "bad" successors	12.4	24.0	6.8	3.1	60.7	5.4	65.6	17.8	12.7	3.9
"Good" successor	10.9	11.4	7.9	0.0	68.0	12.7	74.0	17.3	5.1	3.6
"Bad" successor	15.3	24.2	2.7	0.0	66.2	6.9	68.9	16.9	6.7	7.6

Notes: See Section 4.2.1 for definitions of programme types.

Single = programmes without any successors.

First (bad or good) = programmes followed by a successor, irrespective of whether they are successors themselves or not.

"Good" successors = successor arrangements (i.e. approved within two years of their predecessor) that are either precautionary or drawn for an annualized amount of less than one quarter of the annual exceptional access limit.

"Bad" successors = successors arrangements (i.e. approved within two years of their predecessor) that are drawn for an annualized amount of more than one quarter of the annual exceptional access limit.

Table A.4**Conditionality: Prior actions, compliance and completion rates**

(2008-18)

Sample	Average no. of PAs by completed review	Compliance with conditionality (% total conditions)			Program completion rates (% total programs)		
		Met	Met Partially or with Delay	Not Met or Delayed	Completed most reviews	Off-track mid-program	Quickly off track
SBA	2.0	72.1	15.3	12.5	59.2	10.2	30.6
EFF	3.0	69.9	16.0	14.1	83.3	4.2	12.5
Precautionary	0.9	79.0	9.9	11.2	60.0	0.0	40.0
Non Precautionary	2.7	69.6	16.8	13.5	69.0	10.3	20.7
Euro Area	3.5	59.6	26.1	14.3	60.0	40.0	0.0
<i>EA Without Greece</i>	1.1	71.3	24.8	3.9	100.0	0.0	0.0
Non Euro Area	2.3	72.3	14.7	13.0	67.7	5.9	26.5
Exceptional Access	3.7	64.1	18.0	11.5	63.2	15.8	21.1
Normal Access	1.8	74.0	14.6	11.4	68.5	5.6	25.9
Debt Restructuring	3.4	72.4	15.1	12.4	42.9	28.6	28.6
Non Debt Restructuring	2.1	71.0	15.6	13.2	72.9	3.4	23.7
Single	1.9	72.0	18.3	9.8	86.2	0.0	13.8
Programs followed by good successors	0.7	80.4	9.8	9.8	69.2	0.0	30.8
Programs followed by bad successors	3.7	60.2	21.4	17.9	35.7	35.7	28.6
"Good" successor	1.1	79.2	8.7	12.2	61.5	0.0	38.5
"Bad" successor	5.1	70.6	14.4	15.0	57.1	7.1	35.7

Notes: See Section 4.2.1 for definitions of programme types.

Single = programmes without any successors.

First (bad or good) = programmes followed by a successor, irrespective of whether they are successors themselves or not.

"Good" successors = successor arrangements (i.e. approved within two years of their predecessor) that are either precautionary or drawn for an annualized amount of less than one quarter of the annual exceptional access limit.

"Bad" successors = successors arrangements (i.e. approved within two years of their predecessor) that are drawn for an annualized amount of more than one quarter of the annual exceptional access limit.

Table A.5

Main features and outcomes of different programme categories

Program category	Features	Outcomes
Extended Fund Facilities (versus SBAs)	<ul style="list-style-type: none"> • Larger number of conditions • Rely more heavily on SBs • Less conditionality applied to central banks • Less likely to go off-track 	<ul style="list-style-type: none"> • Lower growth and higher level of public debt before the program • Larger fiscal adjustment • Growth differences tended to disappear over time in comparison with SBAs
Exceptional Access (EXA) programs	<ul style="list-style-type: none"> • Entail more conditions • Rely to a larger extent on PAs • Lower levels of compliance • Slightly more likely to go off-track 	<ul style="list-style-type: none"> • Improvement in economic variables seemed to take longer
Euro Area (EA) programs	<ul style="list-style-type: none"> • Rely more on PAs (less excl. Greece) and less on SBs (more excl. Greece) • More financial conditions (even more including Greece) • Completion/compliance rates improve substantially without taking into account Greece 	<ul style="list-style-type: none"> • Similar to Exceptional Access (EXA) programs and Advanced Economies (AE) since all Euro Area countries —except Cyprus— were EXA programs, while Iceland was the only AE outside the Euro Area
Precautionary arrangements (PA)	<ul style="list-style-type: none"> • Lower number of conditions • Rely to a relatively lower extent on SBs • Rely to a relatively larger extent on quantitative indicators and ITs • Better (and especially «strict») compliance rates 	<ul style="list-style-type: none"> • Better economic conditions at the start of the program • More stable growth rates • Lower public debt • Smaller fiscal adjustment
Programs with Sovereign Debt restructuring	<ul style="list-style-type: none"> • Feature more conditions • Higher share of fiscal-related conditions 	<ul style="list-style-type: none"> • Worse initial economic conditions • Improvement materializes only after completion of IMF programs
Countries with more than one program	Depends on nature of successor	

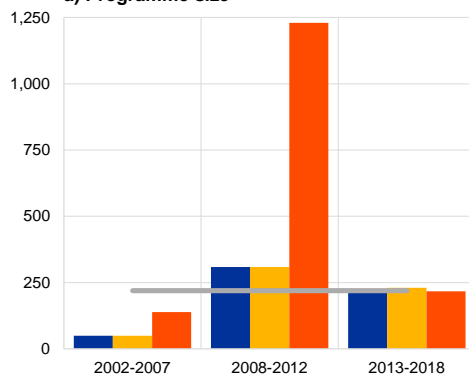
Chart A.1

Overview of programme size and conditionality

(median; percentage of quota)

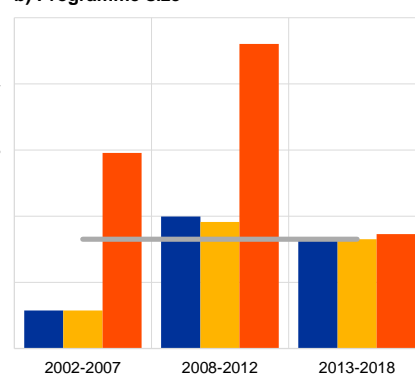
■ All programmes ■ EFF
■ SBA — Median (2002-2018)

a) Programme size



(median; percentage of GDP)

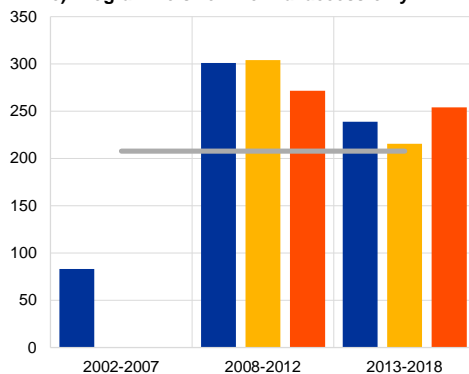
b) Programme size



(mean; percentage of quota)

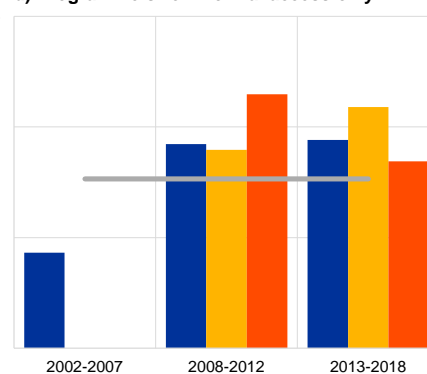
■ All programmes ■ EFF
■ SBA — Mean (2002-2018)

c) Programme size – normal access only



(mean; percentage of GDP)

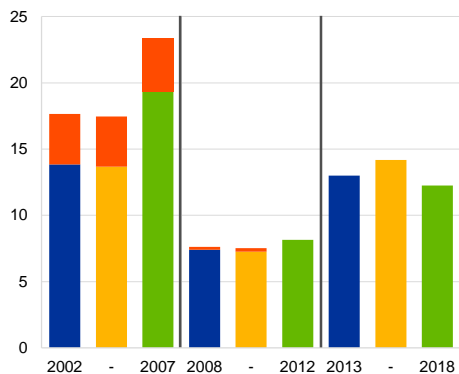
d) Programme size – normal access only



(percentage total)

■ All programmes ■ SPC
■ SBA ■ EFF

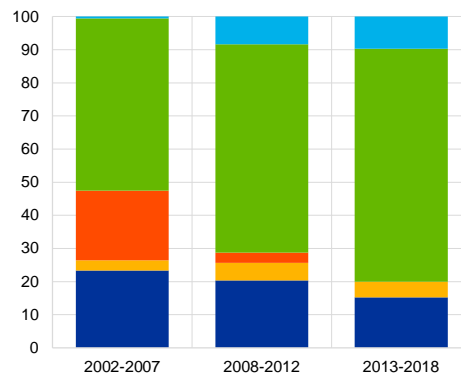
e) Average number of conditions by completed review



(percentage total)

■ PA ■ SB
■ QPC ■ IT
■ SPC

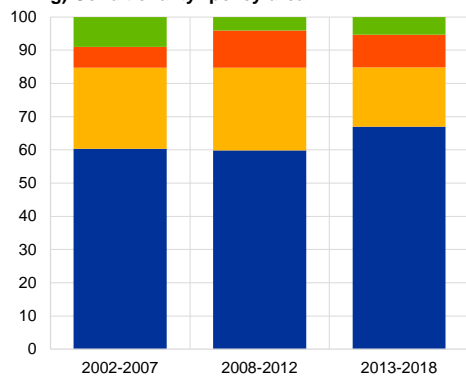
f) Conditionality: type of conditions



(percentage total)

■ Fiscal
■ Financial
■ Central bank
■ Other

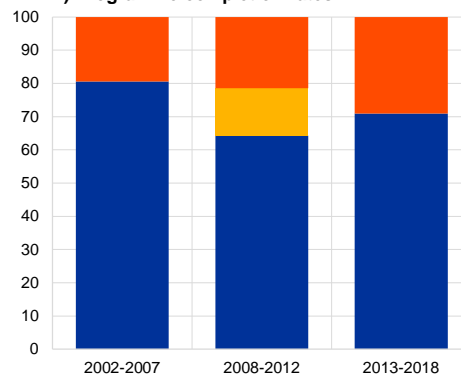
g) Conditionality: policy area



(percentage total)

■ Completed most reviews
■ Off-track mid-program
■ Quickly off track

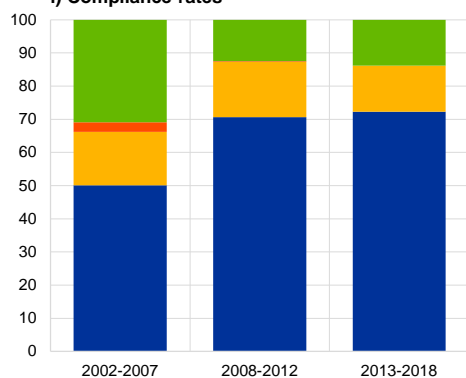
h) Programme completion rates



(percentage total)

■ Met
■ Met partially or with delay
■ Delayed
■ Not met

i) Compliance rates



(percentage total)

■ All
■ SBA
■ EFF

j) Average number of PAs by completed review

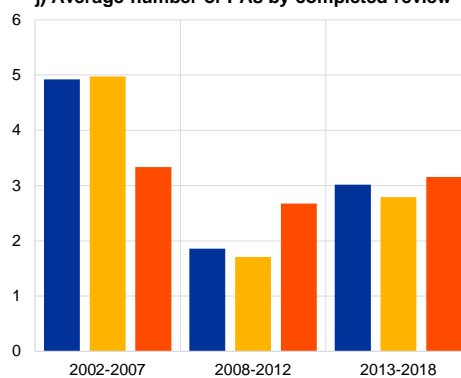
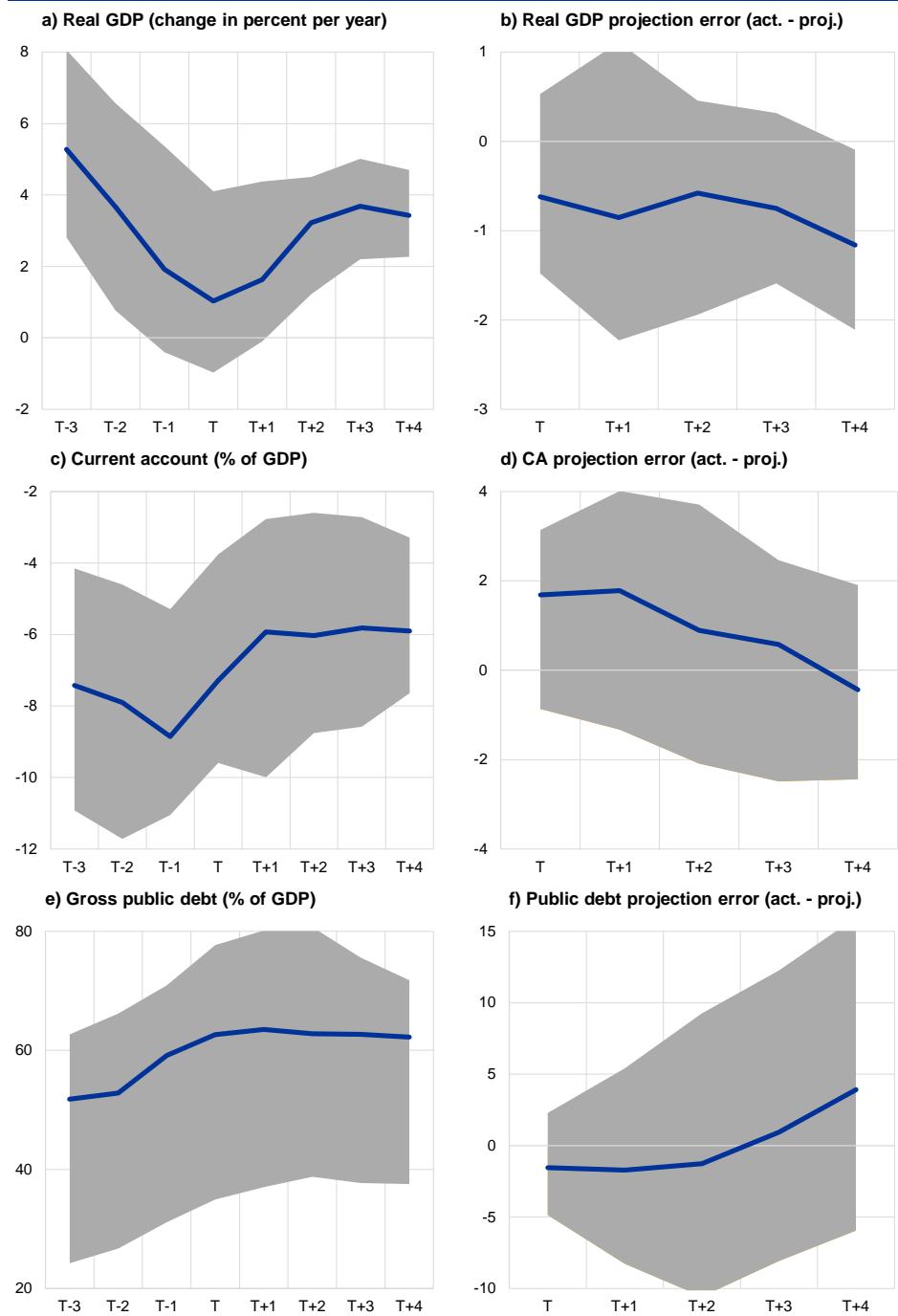


Chart A.2a

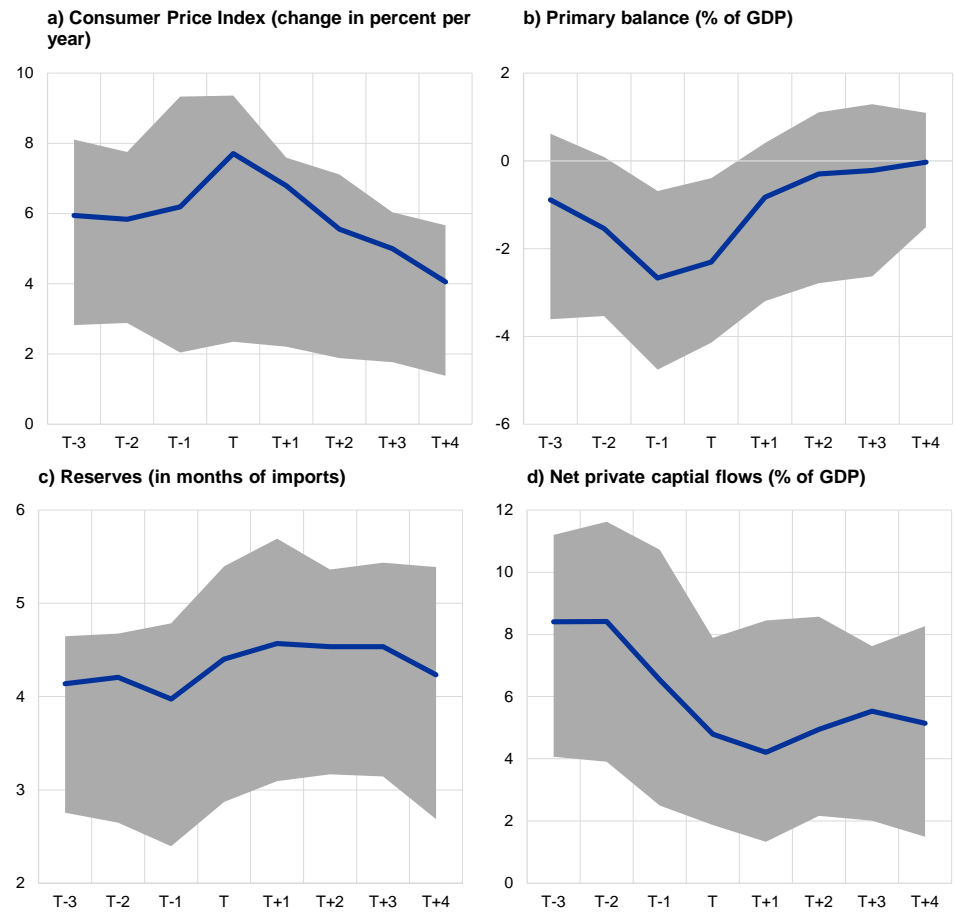
Macroeconomic outcomes and staff projection errors of GRA programmes



Sources: IMF World Economic Outlook October 2018, IMF programme documents, IMF b.o.p. statistics and own calculations.
 Notes: The solid blue line indicates programme country averages, while the shaded light blue area indicates the 25 and 75 percentiles. For projection errors, staff projections at the time of programme approval are compared with actual outcomes.

Chart A.2b

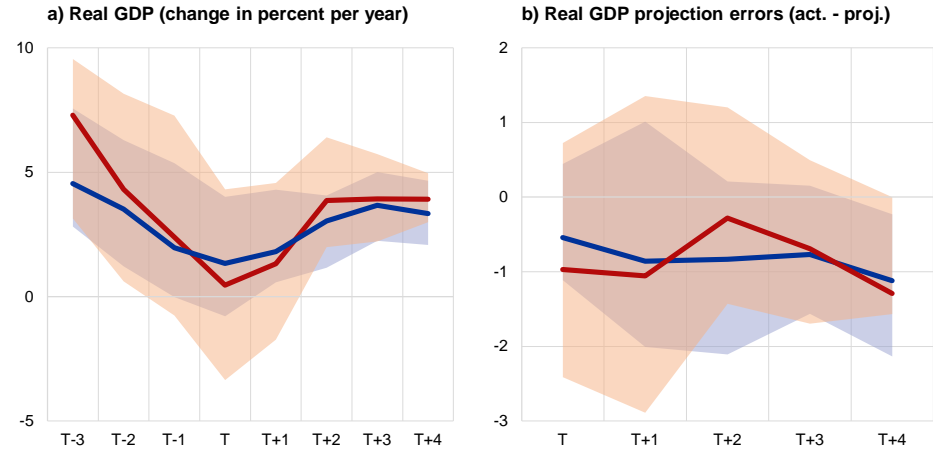
Macroeconomic outcomes of GRA programmes: additional variables



Sources: IMF World Economic Outlook October 2018, IMF programme documents, IMF b.o.p. statistics and own calculations.
 Notes: The solid blue line indicates programme country averages, while the shaded light blue area indicates the 25 and 75 percentiles.
 For projection errors, staff projections at the time of programme approval are compared with actual outcomes.

Chart A.3

Growth outcomes of GRA-funded programmes (“large” versus “moderate” fiscal adjustment)



Sources: IMF World Economic Outlook October 2018, IMF programme documents and own calculations.

Notes: The solid lines indicate programme country averages, while the shaded light blue areas indicate the 25 and 75 percentiles. Blue denotes countries with “moderate” fiscal adjustment, while light red denotes countries with a “large” adjustment during the programme. A relatively “large” fiscal adjustment is defined as a three-year adjustment of the primary balance (starting at programme approval) greater than 3% of GDP. This threshold has been shown by the IMF to approximate the top quartile using historical data that cover annual observations from 1990 to 2011 for advanced and emerging economies with debt greater than 60% of GDP (see IMF MAC DSA).

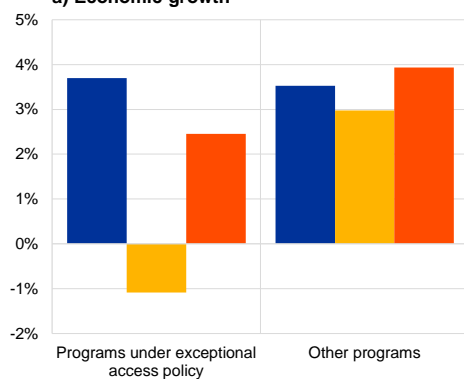
Chart A.4

Macroeconomic outcomes of GRA programmes: normal (54) versus exceptional access programmes (19) (conditional means)

(period averages; annual rate)

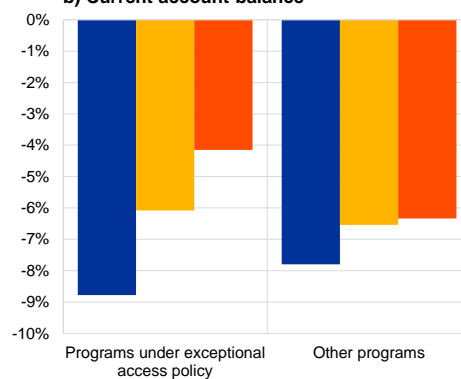
■ Before the program
■ During the program
■ After the program

a) Economic growth



(period averages; as percentage of GDP)

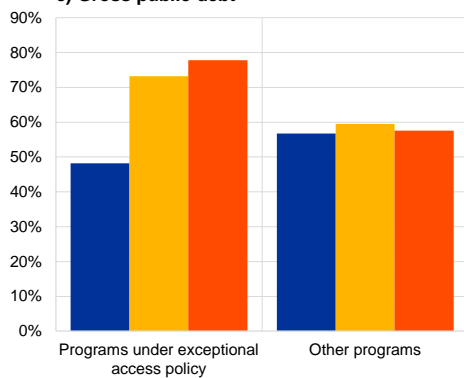
b) Current account balance



(period ranges; as percentage of GDP)

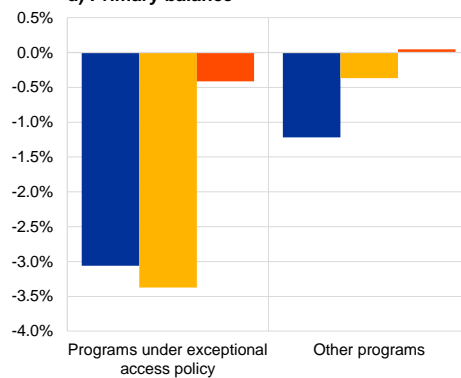
■ Before the program
■ During the program
■ After the program

c) Gross public debt



(period averages; as percentage of GDP)

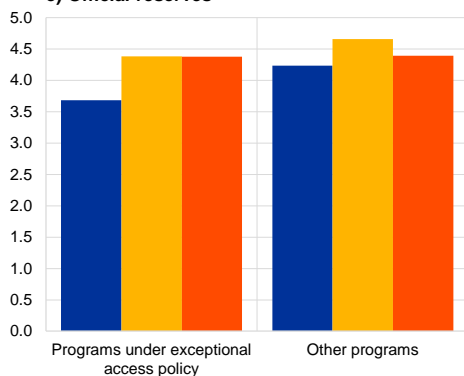
d) Primary balance



(period averages; in months of imports)

■ Before the program
■ During the program
■ After the program

e) Official reserves



(period averages; as percentage of GDP)

f) Net private capital flows

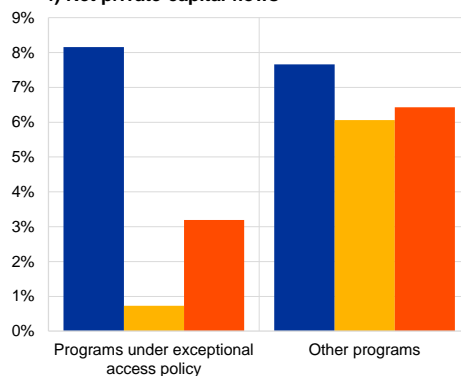


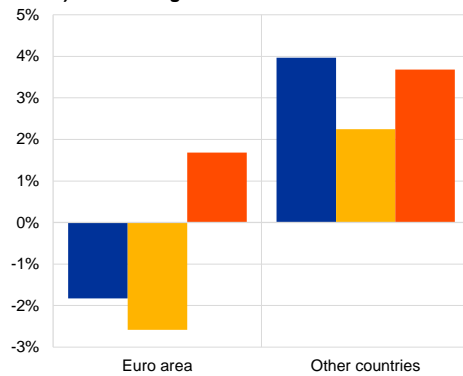
Chart A.5

Macroeconomic outcomes of GRA programmes: euro area programmes (5) versus other programmes (68) (conditional means)

(period averages; annual rate)

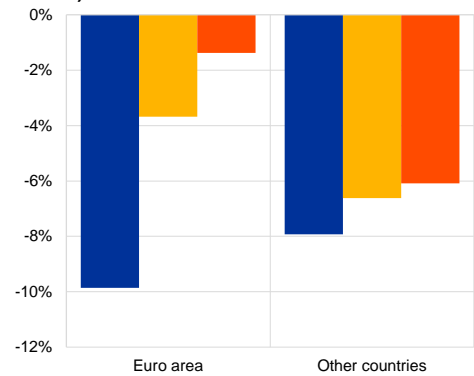
- Before the program
- During the program
- After the program

a) Economic growth



(period averages; as percentage of GDP)

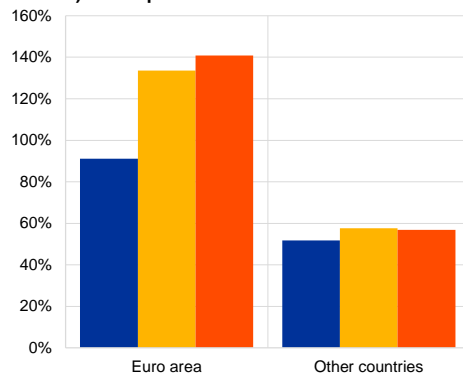
b) Current account balance



(period averages; as percentage of GDP)

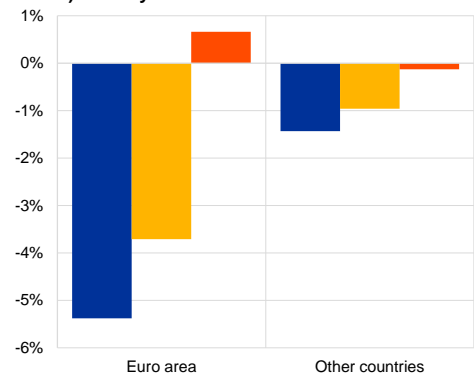
- Before the program
- During the program
- After the program

c) Gross public debt



(period averages; as percentage of GDP)

d) Primary balance



(period averages; as percentage of GDP)

- Before the program
- During the program
- After the program

e) Net private capital inflows

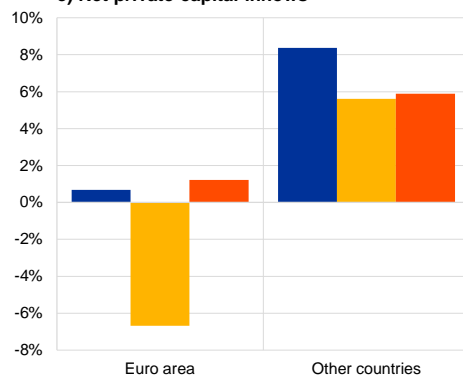


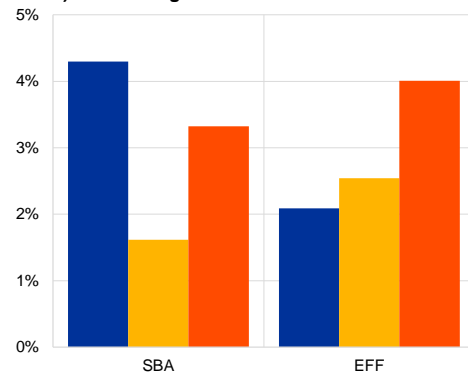
Chart A.6

Macroeconomic outcomes of GRA programmes: Stand-By-Arrangements (49) versus Extended Fund Facilities (24) (conditional means)

(period averages; annual rate)

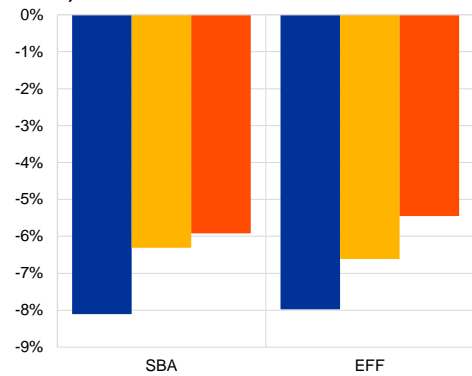
- Before the program
- During the program
- After the program

a) Economic growth



(period averages; as percentage of GDP)

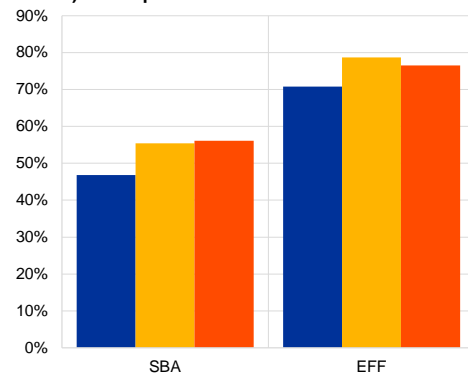
b) Current account balance



(period averages; as percentage of GDP)

- Before the program
- During the program
- After the program

c) Gross public debt



(period averages; as period of GDP)

d) Primary balance

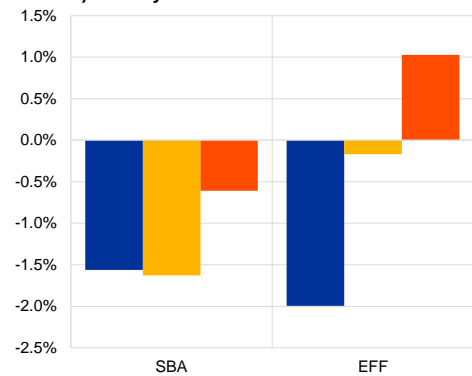


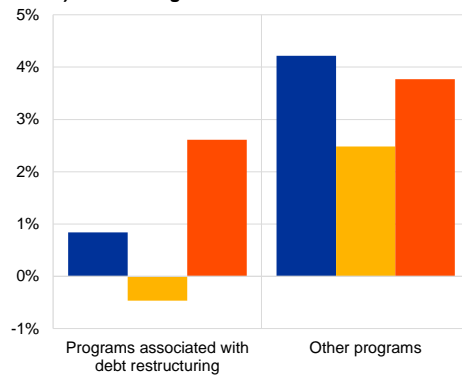
Chart A.7

Macroeconomic outcomes of GRA programmes. Programmes associated with debt restructuring operations (14) versus other programmes (59) (conditional means)

(period averages; annual rate)

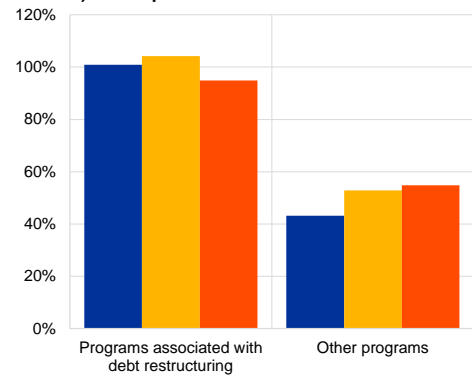
- Before the program
- During the program
- After the program

a) Economic growth



(period averages; as percentage of GDP)

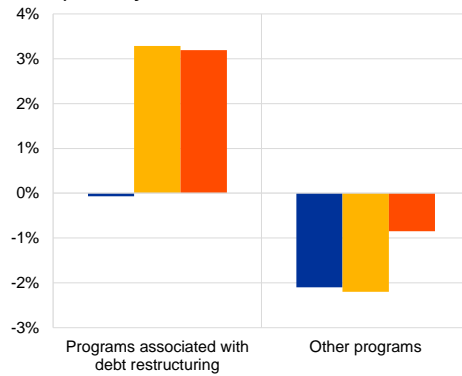
b) Gross public debt



(period averages; as percentage of GDP)

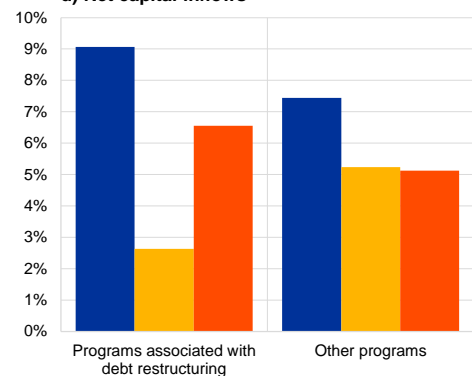
- Before the program
- During the program
- After the program

c) Primary balance



(period averages; as period of GDP)

d) Net capital inflows



Sources: IMF World Economic Outlook October 2018, IMF programme documents, IMF b.o.p. statistics and own calculations. Trebesch, NEW 2014 Update of Haircut Dataset, Bank of Canada Database of Sovereign Defaults.

Chart A.8

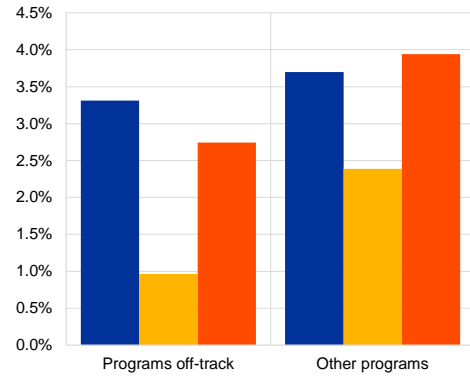
Macroeconomic outcomes of GRA programmes: programmes off-track (24) versus other programmes (49) (conditional means)

(period averages; annual rate)

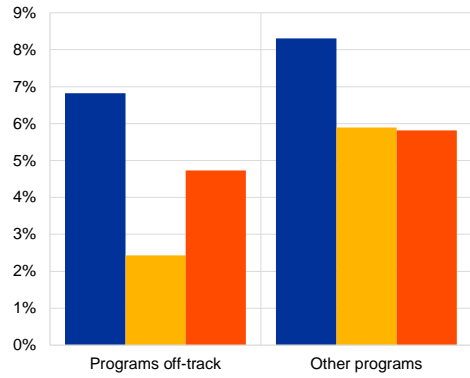
(period averages; as percentage of GDP)

- Before the program
- During the program
- After the program

a) Economic growth



b) Net private capital inflows



Sources: IMF World Economic Outlook October 2018, IMF programme documents, IMF b.o.p. statistics and own calculations.

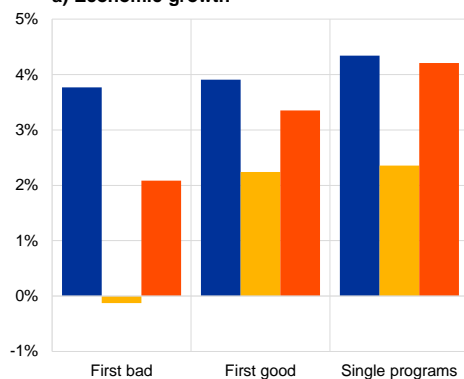
Chart A.9

Macroeconomic outcomes of GRA programmes. Programmes followed by “bad” successor programmes (“first-bad”) versus programmes followed by “good” successor programmes (“first-good”) versus stand-alone programmes (“single”)

(period averages; annual rate)

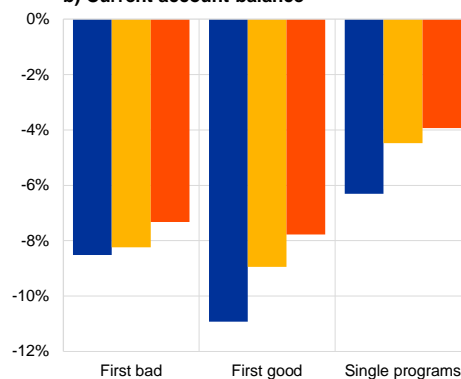
■ Before the program
■ During the program
■ After the program

a) Economic growth



(period averages; as percentage of GDP)

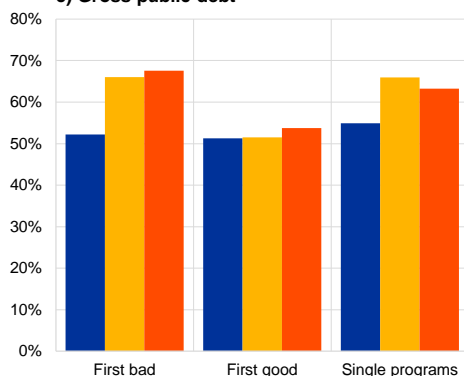
b) Current account balance



(period averages; as percentage of GDP)

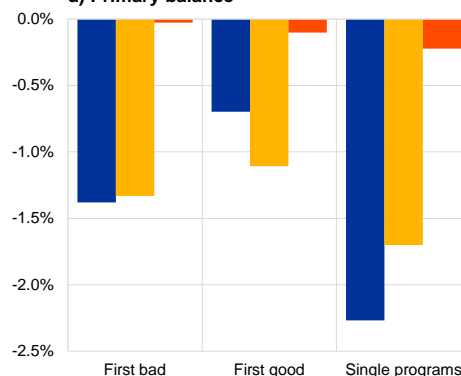
■ Before the program
■ During the program
■ After the program

c) Gross public debt



(period averages; as percentage of GDP)

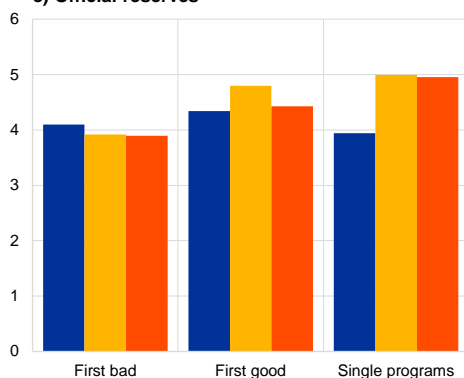
d) Primary balance



(period averages; in months of imports)

■ Before the program
■ During the program
■ After the program

e) Official reserves



(period averages; as percentage of GDP)

f) Net private capital inflows

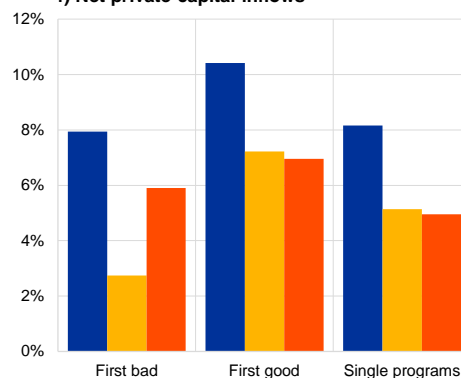
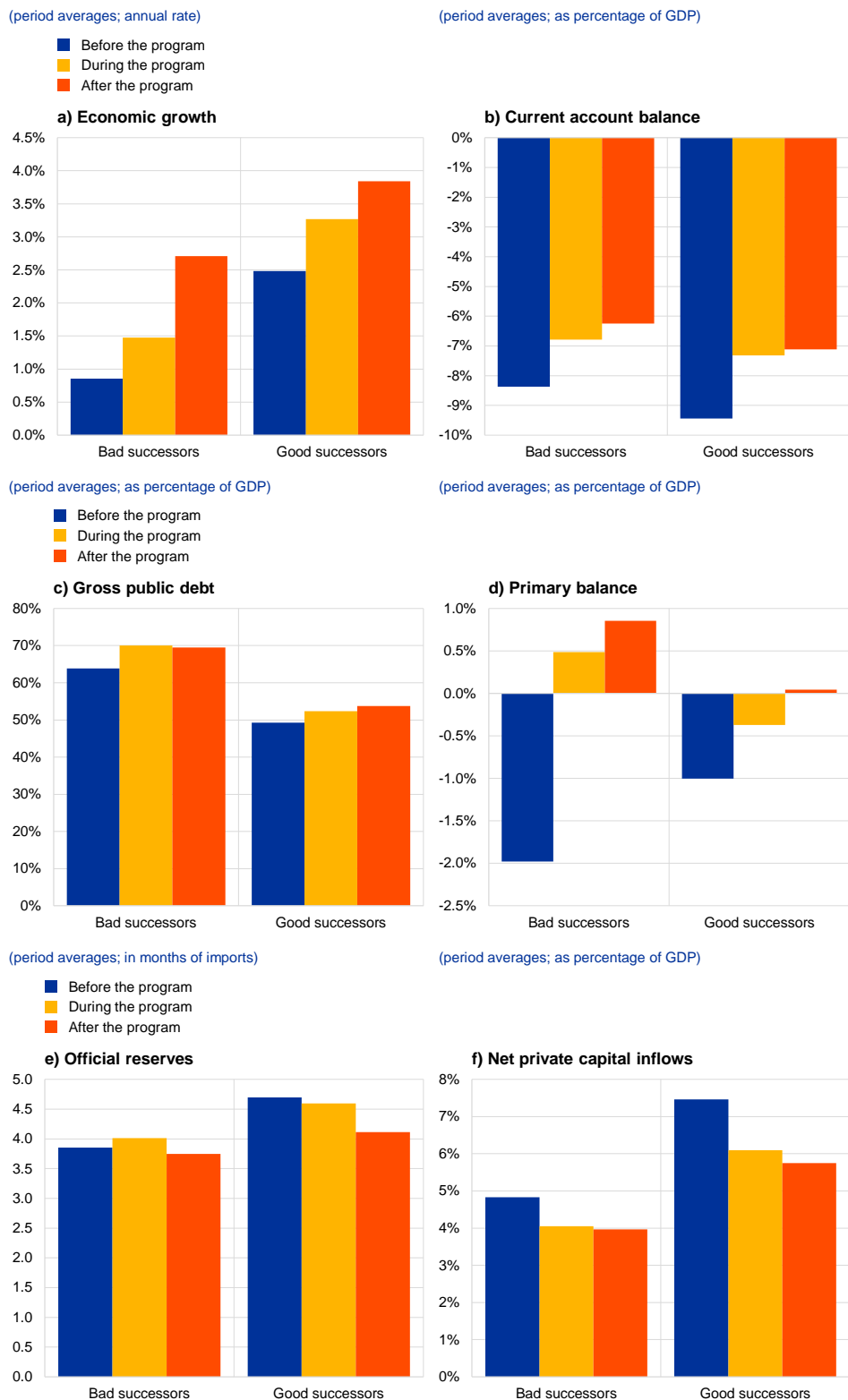


Chart A.10

Macroeconomic outcomes of GRA programmes. “Bad” successor programmes versus “good” successor programmes



Annex 2: Additional tables and charts

Table A.6

GRA-supported programmes, by type

(2008-18)

Number of Arrangements (Total = 73)	SBA (incl. blended)	EFF (incl. blended)	Euro Area	Non Euro Area	Precautionary	Non Precautionary	Exceptional Access	Regular Access	Off-track programs	Non Off-track programs	Programs involving debt restructuring	Non debt restructuring	Single	First programs followed by good successors	First programs followed by bad successors	Successor Good	Successor Bad
SBA (incl. blended)	49	0	1	48	15	34	14	35	20	29	9	40	18	6	10	10	5
EFF (incl. blended)	0	24	4	20	0	24	5	19	4	20	5	19	12	0	0	3	9
Euro area	1	4	5	0	0	5	4	1	2	3	3	2	3	0	1	0	1
Non Euro Area	48	20	0	68	15	53	15	53	22	46	11	57	27	6	9	13	13
Precautionary	15	0	0	15	15	0	0	15	6	9	3	12	3	3	0	9	0
Non Precautionary	34	24	5	53	0	58	19	39	18	40	11	47	27	3	10	4	14
Exceptional Access	14	5	4	15	0	19	19	0	7	12	4	15	8	2	5	0	4
Regular Access	35	19	1	53	15	39	0	54	17	37	10	44	22	4	5	13	10
Off-track programs	20	4	2	22	6	18	7	17	24	0	8	16	4	2	7	5	7
Non Off-track programs	29	20	3	46	9	40	12	37	0	49	6	43	25	4	3	8	8
Programs involving debt restructuring	9	5	3	11	3	11	4	10	8	6	14	0	3	1	3	2	5
Non Debt Restructuring	40	19	2	57	12	47	15	44	16	43	0	59	27	5	7	11	9
Single	18	12	3	27	3	27	8	22	4	25	3	27	30	0	0	0	0
First programs followed by good successors	6	0	0	6	3	3	2	4	2	4	1	5	0	6	0	0	0
First programs followed by bad successors	10	0	1	9	0	10	5	5	7	3	3	7	0	0	10	0	0
Successor Good	10	3	0	13	9	4	0	13	5	8	2	11	0	0	0	13	0
Successor Bad	5	9	1	13	0	14	4	10	7	8	5	9	0	0	0	0	14

Note: See Section 4.2.1 for definitions of programme types.

Table A.7

Conditionality: number, type and policy area of conditions

(2008-12)

Sample	Average no. of conditions by completed review	Type of Condition (%total)						Policy Area (%total)			
		PA	QPC	SPC	SB	IT	Fiscal	Financial	Central Bank	Other	
SBA	7.5	20.1	6.2	3.6	61.2	8.9	59.8	24.4	12.3	3.5	
EFF	8.2	21.8	0.3	0.0	72.9	5.1	59.9	28.0	4.5	7.6	
Precautionary	5.4	15.1	8.2	3.3	54.6	18.9	52.9	30.9	12.9	3.3	
Non Precautionary	8.1	21.7	4.6	3.1	65.1	5.5	61.7	23.3	10.7	4.3	
Euro Area	10.3	30.5	1.9	0.0	64.0	3.6	56.4	32.5	0.7	10.4	
<i>EA Without Greece</i>	5.2	20.0	1.1	0.0	76.4	2.5	41.6	48.9	3.3	6.1	
non Euro Area	7.3	19.2	5.7	3.4	62.7	8.9	60.2	24.2	12.3	3.4	
Exceptional Access	9.7	21.9	4.8	6.0	61.3	6.0	52.2	32.2	10.4	5.2	
Normal Access	6.3	19.5	5.6	1.5	63.7	9.7	64.0	20.9	11.6	3.5	
Debt Restructuring	8.6	19.8	4.7	4.6	64.1	6.9	71.2	16.3	9.4	3.1	
Non Debt Restructuring	7.4	20.5	5.5	2.7	62.5	8.8	56.7	27.3	11.6	4.4	

Table A.8

Conditionality: prior actions, compliance and completion rates

(2008-12)

Sample	Average no. of PAs by completed review	Compliance with conditionality (% total conditions)				Program completion rates (% total programs)		
		Met	Met Partially or with Delay	Delayed	Not Met or Delayed	Completed most reviews	Off-track mid-program	Quickly off track
SBA	1.7	71.2	16.5	0.2	12.4	61.1	13.9	25.0
EFF	2.7	67.5	18.3	0.0	14.2	83.3	16.7	0.0
Precautionary	0.8	88.0	9.1	0.0	2.9	55.6	0.0	44.4
Non Precautionary	2.1	67.3	18.2	0.2	14.5	66.7	18.2	15.2
Euro Area	4.0	60.9	22.6	0.0	16.5	50.0	50.0	0.0
<i>EA Without Greece</i>	1.1	71.3	24.8	0.0	3.9	100.0	0.0	0.0
Non Euro Area	1.6	71.7	16.1	0.2	12.2	65.8	10.5	23.7
Exceptional Access	2.8	64.4	17.6	0.4	11.9	66.7	20.0	13.3
Normal Access	1.3	74.6	16.2	0.0	9.1	63.0	11.1	25.9
Debt Restructuring	2.3	71.6	13.7	0.0	14.6	33.3	44.4	22.2
Non Debt Restructuring	1.8	70.3	17.6	0.2	12.1	72.7	6.1	21.2

Table A.9

Conditionality: number, type and policy area of conditions

(2013-18)

Sample	Average no. of conditions by completed review	Type of Condition (%total)					Policy Area (%total)			
		PA	QPC	SPC	SB	IT	Fiscal	Financial	Central Bank	Other
SBA	14.2	13.7	7.7	0.0	66.6	12.0	67.4	12.1	15.4	5.2
EFF	12.3	16.3	2.5	0.0	73.1	8.0	66.7	21.9	5.9	5.5
Precautionary	12.3	9.8	7.8	0.0	64.9	17.5	77.4	9.1	11.4	2.1
Non Precautionary	13.2	16.5	3.9	0.0	71.7	7.8	64.5	19.9	9.5	6.1
Euro Area	6.8	18.0	3.3	0.0	75.4	3.3	35.0	53.3	10.0	1.7
Non Euro Area	13.2	15.1	4.7	0.0	70.2	9.9	68.0	16.6	9.9	5.5
Exceptional Access	19.1	23.6	7.3	0.0	62.6	6.5	49.4	20.1	19.1	11.4
Normal Access	12.3	14.0	4.3	0.0	71.6	10.2	69.6	17.5	8.5	4.5
Debt Restructuring	15.1	21.3	4.1	0.0	64.9	9.7	61.5	22.7	8.6	7.3
Non Debt Restructuring	12.6	14.1	4.8	0.0	71.4	9.7	68.0	16.9	10.1	5.0

Table A.10

Conditionality: prior actions, compliance and completion rates

(2013-18)

Sample	Average no. of PAs by completed review		Compliance with conditionality (% total conditions)			Program completion rates (% total programs)		
			Met	Met Partially or with Delay	Delayed	Not Met or Delayed	Completed most reviews	Off-track mid-program
SBA	2.8	74.8	11.7	0.0	13.5	53.9	0.0	46.2
EFF	3.2	70.7	15.2	0.0	14.1	83.3	0.0	16.7
Precautionary	1.1	69.9	10.7	0.0	19.4	66.7	0.0	33.3
Non Precautionary	3.5	73.0	14.7	0.0	12.3	72.0	0.0	28.0
Euro Area	1.2	54.3	40.0	0.0	5.7	100.0	0.0	0.0
Non Euro Area	3.1	73.0	12.9	0.0	14.1	70.0	0.0	30.0
Exceptional Access	8.5	62.8	20.3	0.0	11.5	50.0	0.0	50.0
Normal Access	2.4	73.5	13.1	0.0	13.5	74.1	0.0	25.9
Debt Restructuring	5.2	73.7	17.4	0.0	8.9	60.0	0.0	40.0
Non Debt Restructuring	2.5	72.0	13.1	0.0	14.9	73.1	0.0	26.9

Chart A.11

Programmes in euro area and non-euro area countries (2008-18)

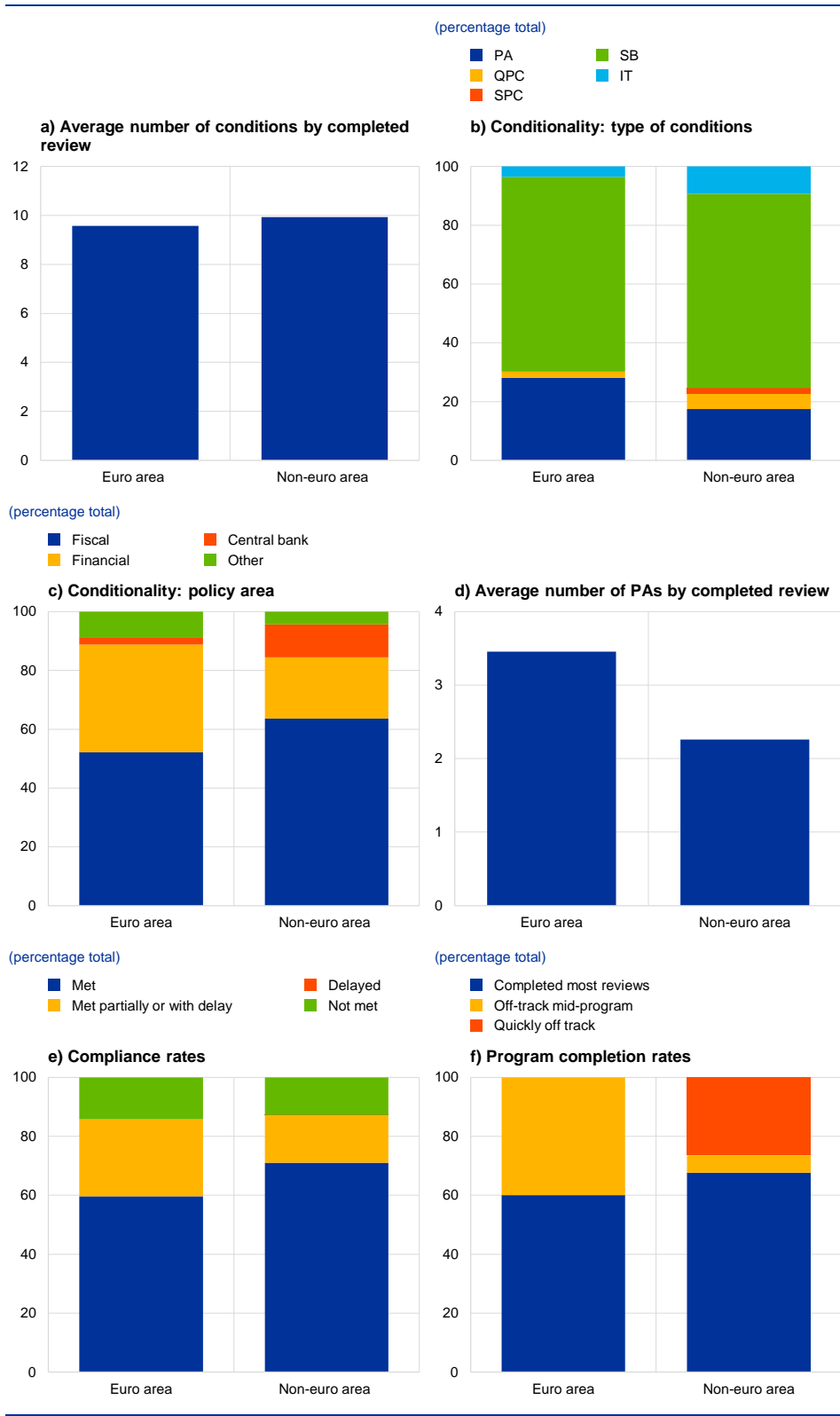


Chart A.12

Stand-By Arrangements (SBA) and Extended Fund Facilities (EFF) (2008-18)

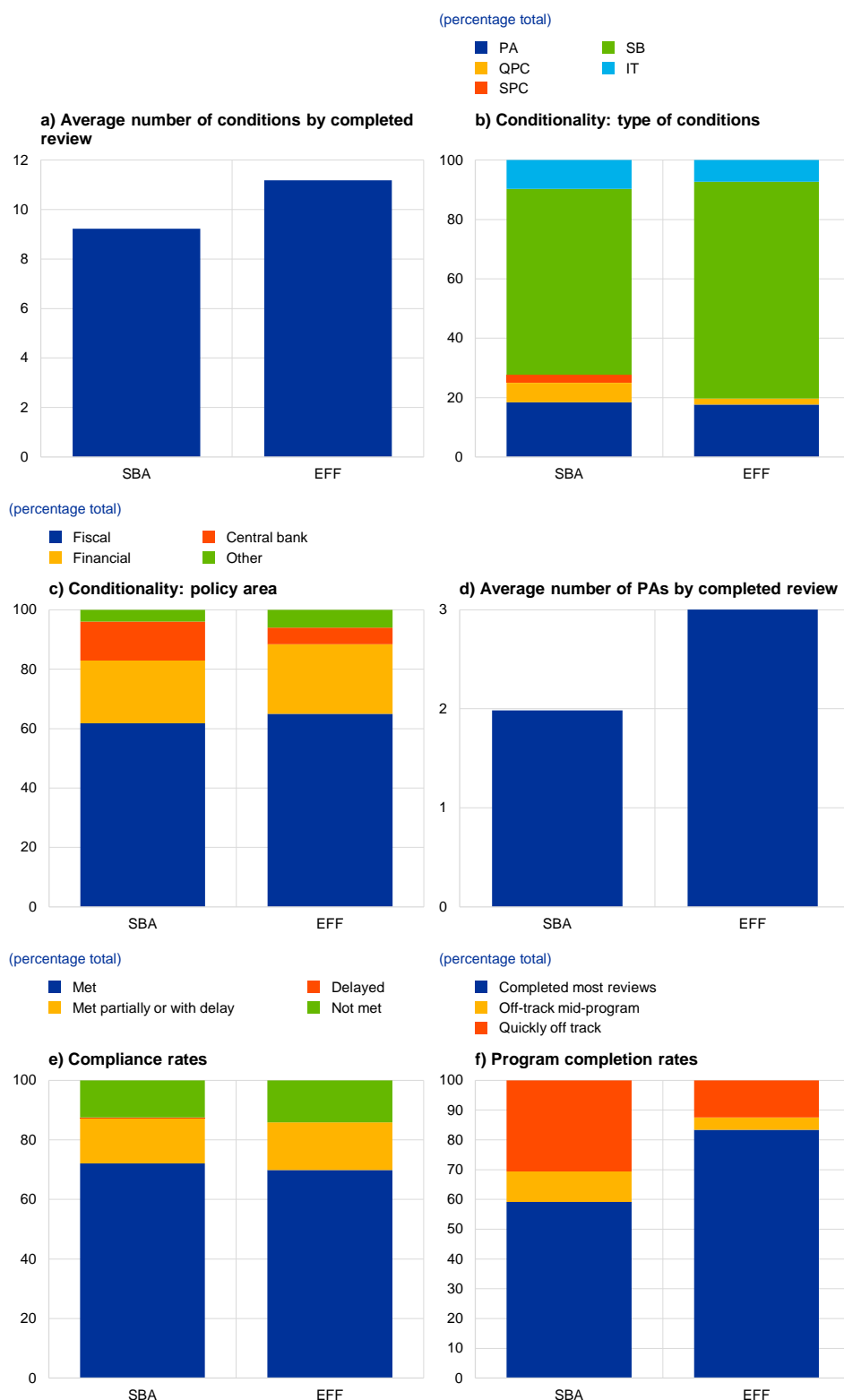


Chart A.13

Exceptional access and normal access programmes (2008-18)

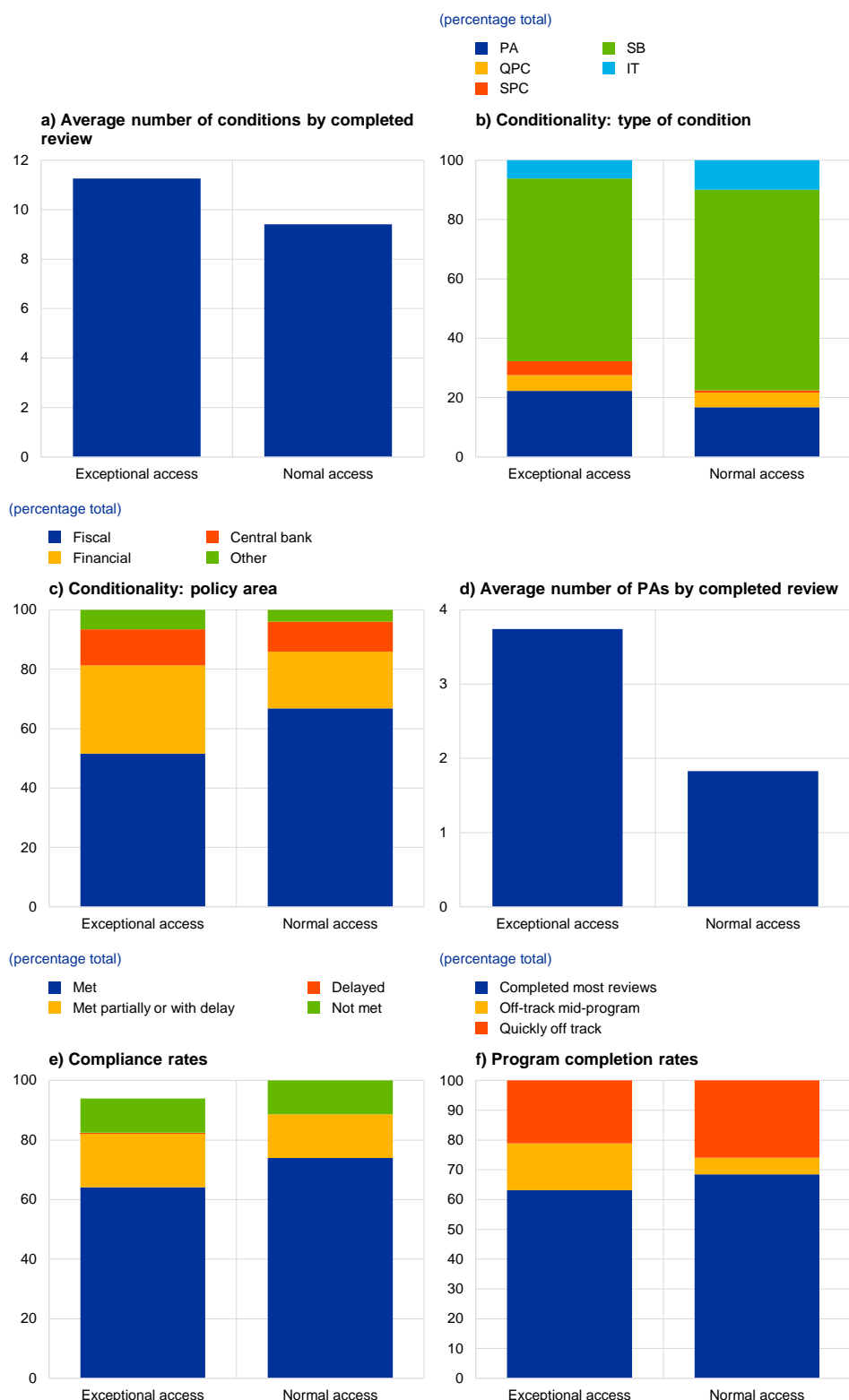


Chart A.14

Precautionary and non-precautionary programmes (2008-18)

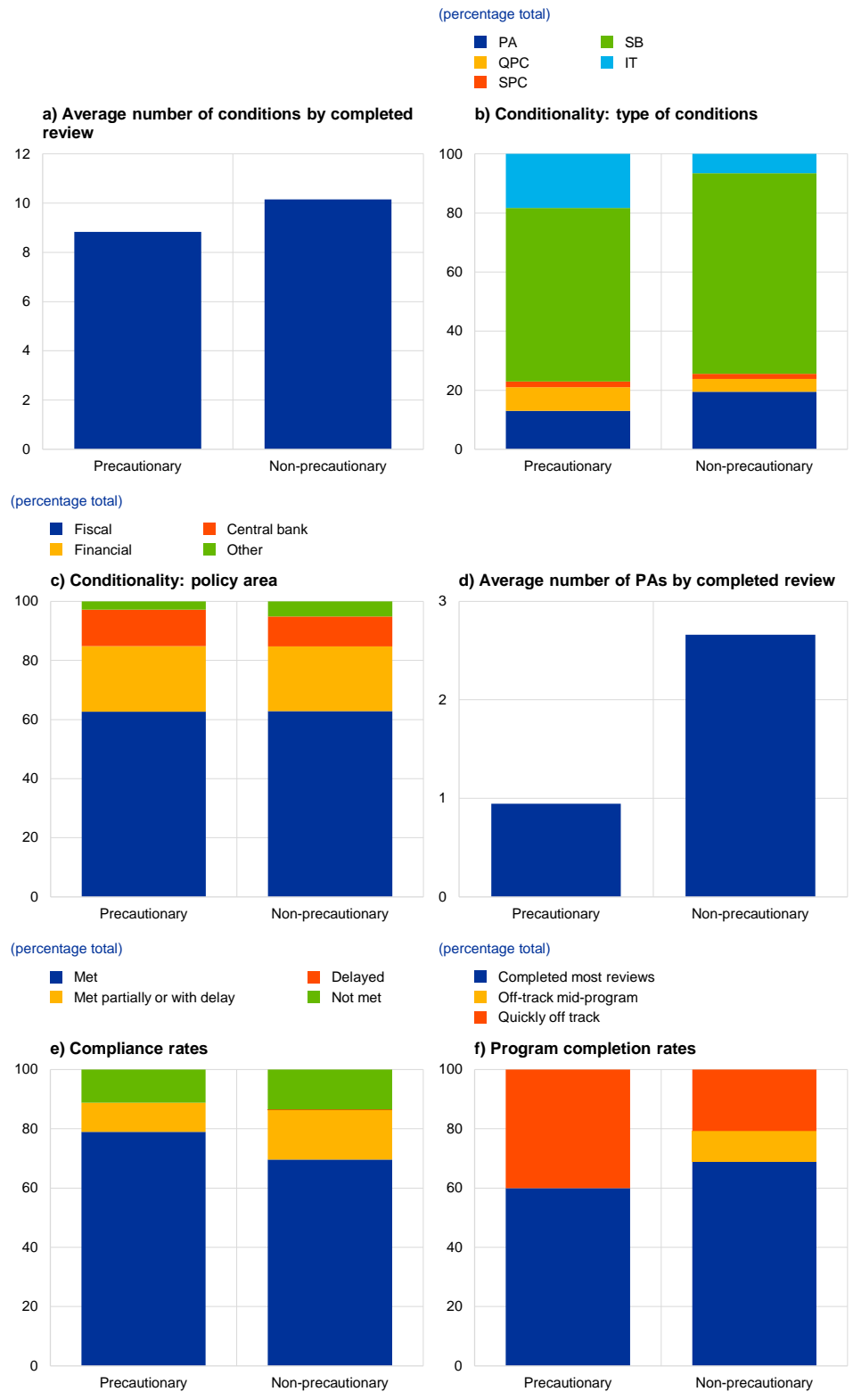
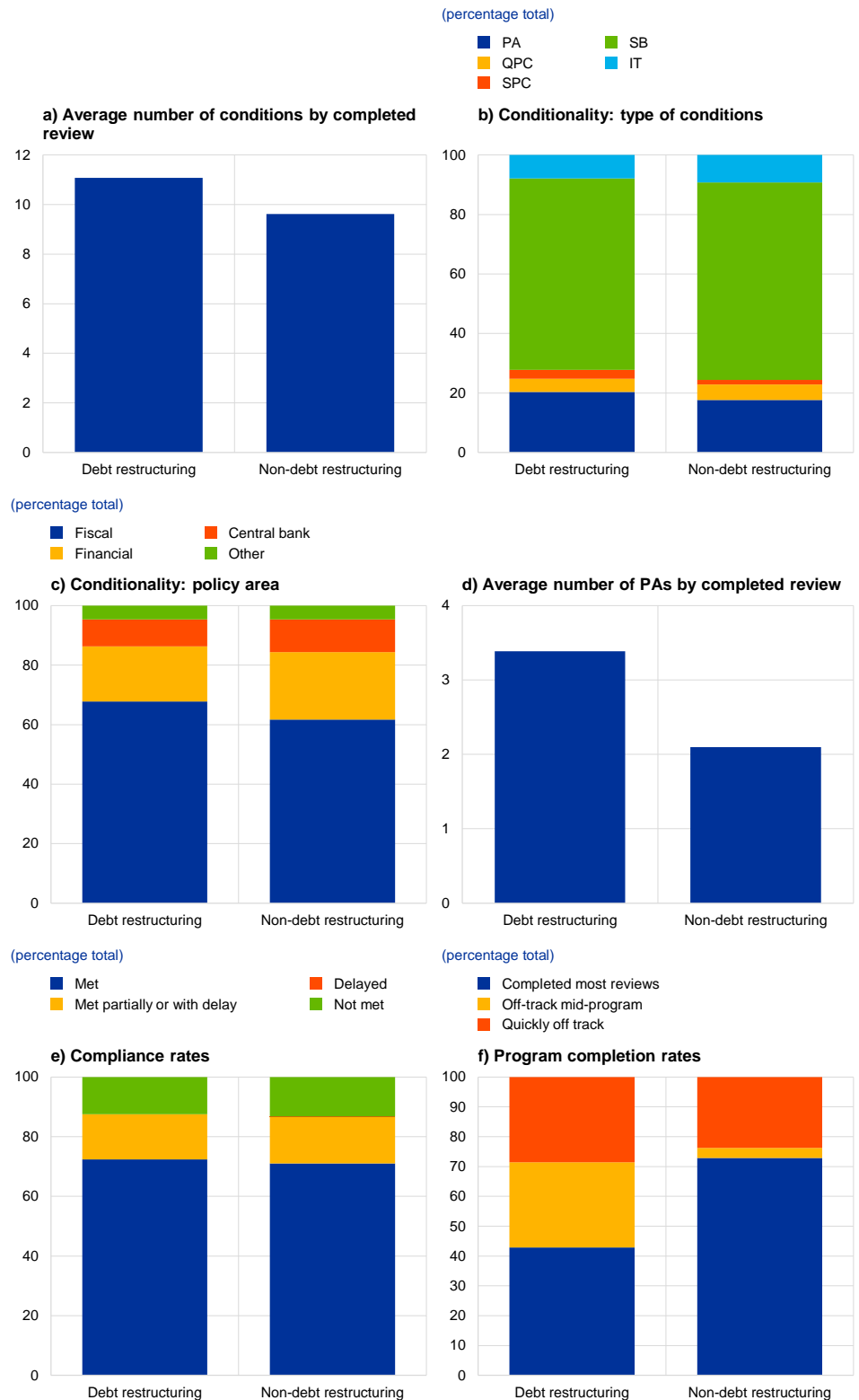


Chart A.15

Programmes with and without debt restructuring (2008-18)



Annex 3: List of programmes: 2008-18

Country	Arrangement Type	Start Date	End Date	Access GDP (%)	Access Quota (%)	Precautionary	Exceptional Access	Off Track	Debt Restructuring	Successor
Albania	EFF	28/02/2014	27/02/2017	1.5	492.37	0	0	0	0	0
Angola	SBA	23/11/2009	30/03/2012	0.8	300.00	0	0	0	0	0
Antigua and Barbuda	SBA	07/06/2010	06/06/2013	4.6	600.00	0	0	0	Y	0
Argentina	SBA	20/06/2018	19/06/2021	5.2	1110.00	0	Y	0	0	0
Armenia	SBA	06/03/2009	29/03/2010	2.7	400.00	0	Y	Y	0	0
Armenia	ECF-EFF	28/06/2010	27/09/2013	1.9	290.00	0	0	0	0	Y
Armenia	EFF	07/03/2014	31/08/2017	0.5	89.36	0	0	0	0	Y
Barbados	EFF	01/10/2018	30/09/2022	2.8	220.11	0	0	0	0	0
Belarus	SBA	12/01/2009	11/04/2010	2.0	418.77	0	Y	0	0	0
Bosnia and Herzegovina	SBA	08/07/2009	07/07/2012	3.7	600.00	0	0	Y	0	0
Bosnia and Herzegovina	SBA	26/09/2012	30/06/2015	1.3	200.00	0	0	0	0	Y
Bosnia and Herzegovina	EFF	07/09/2016	06/09/2020	1.9	167.06	0	0	Y	0	Y
Costa Rica	SBA	11/04/2009	10/07/2010	1.0	300.00	Y	0	0	0	0
Cote d'Ivoire	ECF-EFF	12/12/2016	11/12/2019	1.0	75.00	0	0	0	0	0
Cyprus	EFF	15/05/2013	22/01/2016	2.4	563.21	0	0	0	Y	0
Dominican republic	SBA	09/11/2009	08/03/2012	1.4	500.00	0	0	0	0	0
Egypt	EFF	11/11/2016	10/11/2019	1.9	422.00	0	0	0	0	0
El Salvador	SBA	16/01/2009	16/01/2009	1.9	300.00	Y	0	Y	0	0
El Salvador	SBA	17/03/2010	16/03/2013	1.8	300.00	Y	0	0	0	Y
Gabon	EFF	19/06/2017	18/06/2020	2.2	215.00	0	0	0	0	0
Georgia	SBA	15/09/2008	14/06/2011	2.4	317.43	0	Y	0	0	0
Georgia	SBA-SCF	11/04/2012	10/04/2014	1.0	166.33	Y	0	0	0	Y
Georgia	SBA	30/07/2014	19/12/2014	0.4	66.53	0	0	Y	0	Y

Country	Arrangement Type	Start Date	End Date	Access GDP (%)	Access Quota (%)	Precautionary	Exceptional Access	Off Track	Debt Restructuring	Successor
Georgia	EFF	12/04/2017	11/04/2020	1.0	100.00	0	0	0	0	Y
Greece	SBA	09/05/2010	05/12/2011	5.7	3211.77	0	Y	Y	Y	0
Greece	EFF	15/03/2012	14/03/2016	6.3	2158.77	0	Y	Y	Y	Y
Guatemala	SBA	22/04/2009	21/10/2010	1.1	300.00	Y	0	0	0	0
Honduras	SBA	07/04/2008	30/03/2009	0.2	30.00	Y	0	Y	Y	0
Honduras	SBA-SCF	01/10/2010	31/03/2012	0.5	100.00	Y	0	Y	Y	Y
Honduras	SBA-SCF	03/12/2014	02/12/2017	0.5	100.00	Y	0	0	0	0
Hungary	SBA	06/11/2008	05/10/2010	4.3	1014.78	0	Y	0	0	0
Iceland	SBA	19/11/2008	31/08/2011	5.1	1190.48	0	Y	0	0	0
Iraq	SBA	24/02/2010	23/02/2013	1.1	200.00	0	0	Y	0	0
Iraq	SBA	07/07/2016	06/07/2019	1.7	230.26	0	0	Y	0	0
Ireland	EFF	16/12/2010	15/12/2013	5.7	2321.78	0	Y	0	0	0
Jamaica	SBA	04/02/2010	03/05/2012	4.0	300.00	0	0	Y	Y	0
Jamaica	EFF	01/05/2013	16/09/2016	2.8	225.00	0	0	0	Y	Y
Jamaica	SBA	11/11/2016	10/11/2019	6.3	312.17	Y	0	0	Y	Y
Jordan	SBA	03/08/2012	02/08/2015	2.9	800.00	0	Y	0	0	0
Jordan	EFF	24/08/2016	23/08/2019	1.0	150.00	0	0	Y	0	Y
Kenya	SBA-SCF	02/02/2015	14/03/2016	0.5	180.00	Y	0	0	0	0
Kenya	SBA-SCF	14/03/2016	13/09/2018	1.1	196.00	Y	0	Y	0	Y
Kosovo, Republic of	SBA	21/07/2010	20/01/2012	1.0	157.05	0	0	Y	0	0
Kosovo, Republic of	SBA	27/04/2012	26/12/2013	0.9	154.19	0	0	0	0	Y
Kosovo, Republic of	SBA	29/07/2015	04/08/2017	1.7	250.00	0	0	0	0	Y
Latvia	SBA	23/12/2008	22/12/2011	2.8	1200.02	0	Y	0	0	0
Maldives	SBA-ESF	04/12/2009	03/12/2012	1.6	700.00	0	0	Y	0	0
Moldova	ECF-EFF	29/01/2010	30/04/2013	3.5	300.00	0	0	0	0	0
Moldova	ECF-EFF	07/11/2016	06/11/2019	1.2	75.01	0	0	0	0	0
Mongolia	SBA	01/04/2009	01/10/2010	2.1	300.00	0	0	0	0	0
Mongolia	EFF	24/05/2017	23/05/2020	2.0	435.01	0	Y	0	0	0
Pakistan	SBA	24/11/2008	30/09/2011	2.0	500.00	0	Y	0	0	0

Country	Arrangement Type	Start Date	End Date	Access GDP (%)	Access Quota (%)	Precautionary	Exceptional Access	Off Track	Debt Restructuring	Successor
Pakistan	EFF	04/09/2013	30/09/2016	1.2	424.98	0	0	0	0	Y
Portugal	EFF	20/05/2011	30/06/2014	6.3	2305.72	0	Y	0	0	0
Romania	SBA	04/05/2009	25/03/2011	4.2	1110.76	0	Y	0	0	0
Romania	SBA	31/03/2011	30/06/2013	1.1	300.00	Y	0	0	0	Y
Romania	SBA	27/09/2013	26/09/2015	0.6	170.00	Y	0	Y	0	Y
Serbia, Republic of	SBA	16/01/2009	15/04/2011	0.5	75.00	0	0	0	0	0
Serbia, Republic of	SBA	29/09/2011	28/03/2013	1.3	200.00	Y	0	Y	0	Y
Serbia, Republic of	SBA	23/02/2015	22/02/2018	1.8	200.00	Y	0	0	0	Y
Seychelles	SBA	14/11/2008	18/12/2009	1.2	200.00	0	0	Y	Y	0
Seychelles	EFF	23/12/2009	22/12/2013	1.5	225.00	0	0	0	Y	Y
Seychelles	EFF	04/06/2014	03/06/2017	0.6	104.95	0	0	0	0	Y
Sri Lanka	SBA	24/07/2009	23/07/2012	2.2	400.00	0	0	0	0	0
Sri Lanka	EFF	03/06/2016	02/06/2019	1.0	185.00	0	0	0	0	0
St. Kitts and Nevis	SBA	27/07/2011	03/08/2012	4.5	590.00	0	0	0	Y	0
Suriname	SBA	27/05/2016	16/04/2017	7.8	265.32	0	0	Y	0	0
Tunisia	SBA	07/06/2013	31/12/2015	1.6	400.00	0	0	0	0	0
Tunisia	EFF	20/05/2016	19/05/2020	3.6	375.21	0	0	0	0	Y
Ukraine	SBA	05/11/2008	28/07/2009	3.8	801.75	0	Y	Y	0	0
Ukraine	SBA	28/07/2010	27/12/2012	4.8	728.86	0	Y	Y	0	Y
Ukraine	SBA	30/04/2014	29/08/2014	5.7	800.00	0	Y	Y	Y	Y
Ukraine	EFF	11/03/2015	10/03/2019	9.8	900.00	0	Y	Y	Y	Y

Annex 4: Data sources and variables

A Variables on programme conditionality

Sources: MONA database; Scheubel, Tafuro and Vonessen (2017); Scheubel and Stracca (2016).

Programme types

- SBA = Stand-By Arrangements
- EFF = Extended Fund Facilities
- Blended:
 - “SBA-SCF”: SBA- Stand-By Credit Facility
 - “SBA-ESF”: SBA- Exogenous Shocks Facility
 - “ECF-EFF”: Extended Credit Facility – EFF
- Exceptional access = programmes the approved amounts of which exceed “normal” IMF lending limits, considered on a cumulative basis (300% of quota before 2009; 600% of quota during 2009-16; and 435% of quota since 2016).
- Precautionary = SBAs approved on a precautionary basis – i.e. authorities do not intend to draw on resources.
- Off-track = programmes finalised or interrupted with less than half of the scheduled reviews completed.
- Quickly Off-Track = programmes completed with a total number of reviews below 2.
- Single = programmes without any successors
- First programmes followed by good/bad successors = programmes followed by a successor of “good” or “bad” type.
- Good successors = successor arrangements approved within two years of their predecessor that are either precautionary or low access (annualised amount of less than one-quarter of the annual access limit, following IMF definition).
- Bad successors = drawing successor arrangement approved within two years of their predecessor above one-quarter of the annual access limit (following IMF definition).

Programme size

- Size (% GDP) = Approved amount at the beginning of the programme/GDP in year of approval
- Size (% quota) = Approved amount at the beginning of the programme/quota in year of approval

Average conditions by review: Total number of conditions imposed during the entire life of a programme divided by the number of completed reviews.

Ownership: Total number of prior actions (PA) imposed during the entire life of a programme divided by the number of completed reviews.

Policy areas: Share of conditions in each of the following areas in total conditions:

- Fiscal = General government + civil service and public employment reforms, and wages + pension and other social sector reforms + public enterprise reform and (non-financial sector) pricing;
- Financial = financial sector;
- Central bank = central bank + exchange systems and restrictions;
- Other = international trade policy (excluding customs reforms); labour markets (excluding public sector employment); economic statistics (excluding fiscal and central bank transparency); and other structural measures.
- Programme completion rates: Share of programmes in each category in total number of programmes:
 - Programmes that completed most reviews = programmes which completed half or more of their scheduled reviews;
 - Programmes that went off-track mid-term = programmes which completed more than two but less than half of scheduled reviews;
 - Programmes that went quickly off-track = programmes which completed less than two reviews.

Compliance with conditionality: Share of conditions in each category in total conditions (PA are eliminated as they are always “met”):

Met = met on time

Partially or with delay = partially met + met with delay

Not met or delayed = not met, cancelled, waived or delayed.

B Variables on macroeconomic outcomes

Economic growth/Real GDP: Percentage change in gross domestic product measured in constant prices. Source: IMF World Economic Outlook Database, October 2018.

Current account balance: Current account balance as percent of GDP. Source: IMF World Economic Outlook Database, October 2018.

Gross public debt: General government gross debt as a percentage of GDP. Source: IMF World Economic Outlook Database, October 2018.

Primary balance: General government primary net lending/borrowing as a percentage of GDP. Source: IMF World Economic Outlook Database, October 2018.

Consumer Price Index: End of period percentage change in consumer prices. Source: IMF World Economic Outlook Database, October 2018.

Official reserves: Official foreign exchange reserves in months of imports. Source: World Development Indicators.

Net private capital inflows: Net private capital inflows as a percentage of GDP. Source: IMF b.o.p. statistics.

List of acronyms

AE	Advanced economy
AOA	Articles of Agreement
b.o.p.	Balance of Payments
CCL	Contingent Credit Line
DSA	Debt Sustainability Analysis
EC	European Commission
ECB	European Central Bank
EFF	Extended Fund Facility
EFSF	European Financial Stability Facility
EME	Emerging market economy
ESM	European Stability Mechanism
EU	European Union
EXA	Exceptional Access
FCL	Flexible Credit Line
FFA	Financial Assistance Facility Agreement
GRA	General Resources Account
IMF	International Monetary Fund
IEO	Independent Evaluation Office
IT	Indicative Targets
LOI	Letter of intent
MAC	Market Access Country
MFA	EU Macrofinancial Assistance
MOU	Memorandum of Understanding
NGOs	Non-governmental organisation
PLL	Precautionary Liquidity Line
PA	Prior action
PRGT	Poverty Reduction and Growth Trust
QPC	Quantitative performance criteria
RGA	Regular Access
ROC	Review of Conditionality and Programme Design
ROSC	Report on the Observance of Standards and Codes
SB	Structural Benchmark
SBA	Stand-By Arrangement
SCIMF	EU Sub-Committee on IMF and related issues
SPC	Structural Performance Criteria

Task Force members

Co-Chairs

Marco Committeri

Banca d'Italia, Rome, Italy; email: marco.committeri@bancaditalia.it

Pilar L'Hotellerie-Fallois

Banco de España, Madrid, Spain; email: pshotellerie@bde.es

Members

Monica Algarra

Banque de France, Paris, France; email: monica.algarra@banque-france.fr

Irina Balteanu

European Central Bank, Frankfurt am Main, Germany; email: irina.balteanu@ecb.europa.eu

Carlijn Eijking

De Nederlandsche Bank, Amsterdam, The Netherlands; email: c.h.m.eijking@dnb.nl

Julia Estefanía

Banco de España, Madrid, Spain; email: julia.estefania@bde.es

Sonsoles Gallego

Banco de España, Madrid, Spain; email: sonsoles.gallego@bde.es

Serena Garelli

Banque centrale du Luxembourg, Luxembourg, Luxembourg; email: serena.garelli@bcl.lu

Heather Gibson

Bank of Greece, Athens, Greece; email: hgibson@bankofgreece.gr

Robert Heinbuecher

Deutsche Bundesbank, Frankfurt am Main, Germany; email: robert.heinbuecher@bundesbank.de

Caroline Janssens

Banque Nationale de Belgique, Brussels, Belgium; email: c.janssens@nbb.be

Tobias Krahnke

Deutsche Bundesbank, Frankfurt am Main, Germany; email: tobias.krahnke@bundesbank.de

Christina Lerner

Oesterreichische Nationalbank, Vienna, Austria; email: christina.lerner@oenb.at

Michelle O'Donnell Keating

Central Bank of Ireland, Dublin, Ireland; email: michelle.odonnell.keating@centralbank.ie

Xavier Serra

Banco de España, Madrid, Spain; email: xserra@bde.es

Alessandro Schiavone

Banca d'Italia, Rome, Italy; email: alessandro.schiavone@bancaditalia.it

Luc Stevens

Banque Nationale de Belgique, Brussels, Belgium; email: l.stevens@nbb.be

Melina Vasardani

Bank of Greece, Athens, Greece; email: imvasardani@bankofgreece.gr

Benjamin Vonessen

European Central Bank, Frankfurt am Main, Germany; email: benjamin.vonessen@ecb.europa.eu

© European Central Bank, 2019

Postal address 60640 Frankfurt am Main, Germany
Telephone +49 69 1344 0
Website www.ecb.europa.eu

All rights reserved. Any reproduction, publication and reprint in the form of a different publication, whether printed or produced electronically, in whole or in part, is permitted only with the explicit written authorisation of the ECB or the authors.

This paper can be downloaded without charge from the [ECB website](http://www.ecb.europa.eu), from the [Social Science Research Network electronic library](http://www.repec.org) or from [RePEc: Research Papers in Economics](http://www.repec.org). Information on all of the papers published in the ECB Occasional Paper Series can be found on the ECB's website.

PDF ISBN 978-92-899-3876-1, ISSN 1725-6534, doi:10.2866/835281, QB-AQ-19-018-EN-N