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Inadequate Statistics and Faulty Analysis

Thomas Reichmann and Chris Monasterski

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Prepared by Thomas Reichmann and Chris Monasterski

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Author's E-Mail Address: treichmann@imf.org; kmonasterski@imf.org

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ABBREVIATIONS

ABS	Australian Bureau of Statistics
BCM	Banque Centrale de Mauritanie
CBG	Central Bank of The Gambia
CPI	consumer price index
GDDS	General Data Dissemination System
GDP	gross domestic product
IFI	international financial institution
NBT	National Bank of Tajikistan
PRGF	Poverty Reduction and Growth Facility
ROSC	report on the observance of standards and codes
SDDS	Special Data Dissemination Standard

EXECUTIVE SUMMARY

The IMF's economic and financial analysis and the quality of its policy advice and economic programs are predicated on the availability of timely, accurate data. By and large, the process of data provision to the Fund works well: within the capabilities of their national statistical systems, countries provide a vast amount of information that is in most cases reliable and available within a reasonable period of time. Nevertheless, there have been instances where data inadequacies have led to a wrong assessment of a country's situation and hence to incomplete or inappropriate policy recommendations. Based on bad data, IMF staff may have provided a more positive assessment of a given economic situation than warranted or given policy recommendations that unnecessarily postponed needed adjustments. Instances of data that subsequently prove to be wrong or incomplete are probably quite frequent, but usually they are of little consequence and therefore go unreported. This paper reports, nonetheless, on several cases where staff documented that their analysis had been adversely affected by faulty data. Most of these cases involved the fiscal deficit and its financing, and the level and liquidity of the central bank's international reserves.

I. GENERAL CONSIDERATIONS

1. Reliable information lies at the heart of the work of the IMF. The Fund's analysis of economic and financial events, the quality of its policy advice, and that of the economic programs supported by its resources are predicated on the availability of timely and accurate data. Though the production and dissemination of statistics is hostage to the varying capabilities of the statistical institutions in member countries and to the changing needs of an evolving world economy, the IMF has generally been able to count on a large amount of data of largely acceptable quality that allows it to carry out its mandate. Nonetheless, there have been instances where data inadequacies have led the Fund to a wrong assessment of a country's situation and hence to incomplete or inappropriate policy recommendations.
2. The need for accurate information was recognized in the framing of the IMF's Articles of Agreement, where Article VIII, Section 5 establishes a general obligation on the part of members to furnish the Fund with "such information as it deems necessary for its activities."¹ This provision was defined as "the minimum necessary for the effective discharge of the Fund's duties" and specifically included a list of twelve categories of data that member countries were required to provide. In line with the perceived needs at the time, this list was heavily weighted towards gold, trade, and exchange rate arrangements.
3. With changes in the world economy and the associated changes in the role of the IMF, the data requirements specified in Article VIII, Section 5 increasingly came to be seen as incomplete. Thus, in 2004, the list of required information was expanded to include some key fiscal and monetary data (such as the budget deficit, monetary aggregates, and interest rates) that were deemed essential for effective surveillance. At the same time, the concept of failure to provide information was clarified to include both the non-provision of information as well as the provision of inaccurate information (see Decision No. 13183—IMF, 2004a).
4. There is a general expectation that the information that members provide to the Fund is complete, accurate and up-to-date. This expectation is by and large shared by markets, academics, and other users of the information that subsequently is disseminated by the Fund. However, this expectation is not necessarily always fulfilled, as it is subject to the country's ability to compile the information and to its willingness to supply it to the Fund. The obligation defined in Article VIII, Section 5 therefore is not absolute; it requires the Fund to "take into consideration the varying ability of members to furnish the data requested" and to provide these data "in as detailed and accurate a manner as is practicable and, so far as possible, to avoid mere estimates." This reality also imposes on the Fund the responsibility to help ensure that the data it receives and disseminates are the best that can be obtained under the circumstances.

¹ In addition, Article IV, section 3(b) establishes the obligation on the part of members to provide the Fund with information on their exchange rate policies.

5. The Fund is, therefore, not just a passive recipient of information but plays a role in improving its quality. The knowledge garnered through surveillance of the economic situation and the discussions on the stance of policies in member countries enable the staff to assess the overall plausibility of the received information. Moreover, the Fund's financial programming framework, with its set of inter-linked sectoral balance sheet identities, allows the data to be cross-checked and refined.² Still, the most important determinants of the quality of the statistical information are the internal procedures and safeguards within each country in regard to the compilation and processing of source data. The countries' efforts can be strengthened by Fund activities, including technical assistance to upgrade the countries' statistical systems and the setting of international standards for the compilation and dissemination of statistics.

6. By and large, the process of data provision to the Fund works well. Within the capabilities of their national statistical systems, countries provide a vast amount of information that is, in most cases, reliable and available within a reasonable period of time. This information, refined by the Fund's internal process of cross-checks, provides largely adequate assurances of quality that establish an acceptable basis for the Fund's policy analysis and allow its dissemination through the Fund's flagship statistical publications. However, "...while these cooperative arrangements have generally served the Fund well, there have been a number of cases in which problems in data reporting—misreporting, delayed reporting, and nonreporting of information—have nonetheless arisen. Incomplete or inaccurate information can detract from the quality of the advice the Fund gives to a member and ...significantly impede the Fund in the exercise of surveillance and especially in its role in crisis prevention" (IMF, 2003a).

7. Though instances of data that subsequently prove to be wrong or incomplete are probably quite frequent (Box 1), usually these problems are of little consequence and therefore go unreported. In most cases, such minor data inaccuracies are associated with preliminary information that is corrected in subsequent revisions. When the Fund has been suspected of major analytical failures that resulted in misguided policy advice, these failures, inasmuch as they involved data, have been attributed either to a generalized absence of relevant information—hence the ongoing Data Gaps Initiative—or to ignoring existing data—such as the information on housing or credit expansion in the recent global financial crisis; cases of outright attribution to inaccurate numbers are less frequent and often more difficult to document.

² There are, however, important aspects of the economic reality that can evade the usual consistency cross-checks, such as the integrity and coverage of inflation measures, under- or over-invoicing of foreign trade or, most prominently, the measuring of the informal economy. It is up to staff to gauge the likely effects of these inadequacies and incorporate them in its analysis, but even with the staff's best efforts, uncertainties are likely to remain.

Box 1. “Bad Statistics”: An Example from Australia

Australia’s is considered among the top statistical systems in the world, nevertheless The *Sydney Morning Herald* (July 3, 2012) included the following article:

“ABS admits it produced bad statistics.

“The Bureau of Statistics has got the official employment figures wrong, and although it is happy to acknowledge the errors, it won’t correct them on the official record because it would cost too much money... assistant statistician Paul Mahoney said unemployment probably climbed 30,000 to 35,000 more than officially acknowledged in the first nine months of last year and climbed 60,000 to 70,000 less than acknowledged in 2010...

...This means official figures overstated the weakness in the labor market that led the Reserve Bank to cut rates at the end of last year and overstated the strength that led it to push up rates at the end of 2010... The problem arises because in order to convert the results of its survey into figures for the whole nation the ABS has to estimate the size of the Australian population. Usually it gets the estimate right. But at times when the rate of population growth is changing rapidly it can get it wrong....”

8. Even when cases of inaccurate information are documented, it does not necessarily follow that they led to errors in analysis or policy recommendations. The documented cases of failures in the provision of information to the Fund fall either under the heading of breaches of a member’s obligation under Article VIII, Section 5, or under that of misreporting of information to the Fund.³ Formal cases of misreporting or breach of obligations are few relative to the overall volume of Fund activity,⁴ as normally instances of faulty information are corrected before there is a need for action by the Fund, either in the course of the country’s normal data revision process or after Fund staff has alerted the authorities about any inconsistencies that may have been found.

9. This note is limited to the discussion of these documented cases of misreporting, even though there may be cases of data-induced shortcomings in analysis that left no traces in Fund documentation. Most documented episodes of misreporting are associated with a finding that the country has made a noncomplying purchase; i.e., a purchase that was authorized on the basis of information—subsequently proved to be inaccurate—indicating that a performance criterion or other condition of purchase had been met. But again, such cases are not that frequent since there is a presumption that, at the stage of discussion and formulation of the policy program that underlies a request for use of Fund resources, IMF staff exercises due diligence to ensure that the best available data inform the program and enter into the formulation of its performance criteria—notwithstanding that on occasion, the

³ Misreporting has a more narrow definition whereby it is associated with the provision of information under a program supported by the use of Fund resources or the Policy Support Instrument.

⁴ From 2000 through March 2015, there were 62 cases of misreporting in the context of Fund programs, sharply up from the 9 cases in the period from 1985 to 2000. Of these 62 cases, 11 were considered “de minimis,” 38 received waivers, and only 13 required corrective actions, usually involving repurchase.

rush to conclude a negotiation may impede a thorough examination of the numbers used. Thus, cases of noncomplying purchases seldom involve information that fundamentally affected the staff's ex-ante assessment of the economic situation of the country.

10. Data failures have arisen even where staff have formally rated a country's data as adequate for surveillance. Reports on Article IV consultations with member countries include an assessment by staff (in recent years presented as a rating) on the adequacy of the country's data for surveillance; often, however, as can be seen from the cases described in the second part of this paper, major data failings have occurred even when these ratings indicate that such data are largely adequate. When data inadequacies have impaired the staff's understanding of a country's economic situation, the consequences have usually been twofold: (i) staff may have assessed the economic situation more positively than warranted by the actual facts; or (ii) they may have affected the nature of the policies recommended or included in a program, thereby biasing or unnecessarily postponing the policy adjustments needed to prevent a worsening of the situation.

II. A TYPOLOGY OF MISREPORTING

11. Data inadequacies have in most cases arisen in two, often interrelated, areas: the fiscal deficit and its financing, or the level and liquidity of the central bank's international reserves.

12. Fiscal restraint is a frequent feature of the policies included among the performance criteria of the economic programs supported by Fund resources. However, in the social and political environment in which economic policies are implemented, fiscal adjustment is fraught with difficulties, and, during negotiations on a program, authorities are sometimes tempted to hide the extent of an existing fiscal imbalance in order to reduce the degree of adjustment that will be required. Or, once a country is in a program, they are tempted to misreport on the fiscal performance so as to appear to observe the corresponding target and avoid the difficulties associated with correcting the deviation or the repercussions of a suspension of an IMF program.⁵

13. Regardless of whether they are reported to the IMF, the actual fiscal deficits still need to be financed. Often this financing is obtained from the central bank or the banking system in general. When a deficit is underreported, the reporting of monetary aggregates also needs to be altered, in order to present a coherent picture. Thus, an underreporting of credit to the public sector is matched either by underreporting broad money (as in Mauritania in 2001–02) or by overstating the level of international reserves (as in The Gambia in 2001, Hungary in 1982–89, Russia in 1996, or Zaire in 1985). Clearly such manipulations can produce a misleading view about the strength of inflationary pressures or the sustainability of a

⁵ This is an example of what is known as Goodhart's Law, with the popular formulation of "When a measure becomes a target, it ceases to be a good measure."

country's external position. The staff put it succinctly when analyzing Hungary in a 2000 paper on misreporting of information (IMF, 2000a): "Had the staff been aware of actual...developments, the program would not have been submitted for Board approval with the same quantified criteria. Had correct data been known, it would have at least affected the staff's assessment of the size of corrective actions needed...."

14. Aside from recourse to the domestic banking system, the financing of the extra fiscal deficit frequently involves borrowing from other parts of the public sector—not included in the agreed scope of the fiscal performance criteria—such as from the social security system (Jordan in 1996–97), the local non-bank private sector, or from abroad (Hungary 1982–89, Greece 1997–2010). The case of Jordan even involved a quite elaborate scheme to obscure the budgetary situation, as the deficit was ostensibly reduced by claiming higher tax revenues, and, in turn, these were explained by an overstatement of the growth of GDP, thereby further complicating the assessment of the economic situation. In the case of Greece, whose deficit was financed mostly by foreign borrowing, the consequent underreporting of such debt operations affected the assessment of the medium-term sustainability of the fiscal position and of the country's vulnerability to the drying up of this source of financing.⁶

15. Finally in respect to data on the fiscal performance, there are cases in which the deficit is financed by the accumulation of domestic or external arrears. Usually, these provide little scope for significantly distorting the views on the economic situation. However, in the case of Ghana (2000), the arrears were large enough for staff to subsequently indicate that knowing of their presence "would have resulted in different policy recommendations."

16. The other major area where misreporting may have significantly misled the staff involves the international reserves of the central bank. Often, misreporting took the form of omitting to inform Fund staff that part of the reserves had been encumbered by pledging them as guarantees for external loans to the public or private sectors. This happened in the Kyrgyz Republic in 1996–98, where staff later commented that "the staff's assessment of the Kyrgyz Republic's economic situation and its policy advice...could have been different..." In Russia in 1996, "...the balance sheet of the Central Bank of Russia had in 1996 given a misleading impression of the true state of the reserves and of monetary and exchange rate policies." And in Tajikistan in 2002–05, "...the recent disclosure of new information and data...warrants a major reassessment of Tajikistan's performance under the three-year PRGF...."

17. The most glaring example of misreporting in this area was that of Ukraine (1996–98), when reserves were not only encumbered but were artificially inflated by lending out part of them and redepositing the loans back at the central bank (via foreign subsidiaries that on-lent the money to local banks). As a result, once it was revealed that actual reserves were less than a third of those reported by the authorities—and less than half the amount the IMF staff

⁶ Greece also employed off-balance sheet swaps that helped to hide some of its debt.

had assumed when framing the program supported by an extended arrangement—it became necessary to modify the agreed exchange rate policy and to fully redesign the program.

18. The failings in data provision that contributed to two major crises in the 1990s—the Mexico crisis of 1994–95 and the Southeast Asia crisis of 1997–98—also fall broadly into these categories as they involved inadequacies in the reporting of international reserves and of external debt developments that directly or indirectly compromised these reserves. In the case of Mexico, there were lags in the provision of information about reserves and about a rapid dollarization of the short-term public debt. The lack of up-to-date information on these developments obscured the assessment by staff and financial markets of the true situation and impeded the issuance of an early warning of the looming difficulties. In Southeast Asia, the crisis affected primarily Indonesia, Korea, and Thailand and involved gaps in data, such as the failure of the Thai authorities to report forward operations that encumbered their reserves, or the lack of information about short-term foreign currency borrowing by private sector entities in all three countries that exposed their economies to adverse shifts in market sentiment or a depreciation of the home currency and eventually imposed a financial burden on the public sector.

III. COUNTRY CASES^{7,8}

The Gambia (2001)

19. A Poverty Reduction and Growth Facility (PRGF) arrangement for The Gambia was approved by the Executive Board for the period 1998–2001. All the resources available under the arrangement were disbursed, although some of the 2001 disbursements occurred only after the Executive Board had granted waivers in respect to the non-observance of several performance criteria. These waivers were conditioned on the accuracy of the data and information reported by the authorities. In the event, this proved not to have been the case.

20. A 2004 report on noncomplying disbursements (IMF 2004b) notes that, in response to concerns about data raised by the staff in 2003: “...[the authorities] acknowledged that unprogrammed public expenditure in 2001 had not been recorded and that the path of foreign exchange reserves and lending by the CBG to the central government had been misstated to the Fund... The revised data implied that net international reserves had been overstated by 51 percent of the previously reported level at end-December 2001... the non-recording of

⁷ Cases marked with a * are excerpted from *Misreporting of Information to the Fund—Policies, Procedures and Remedies—Preliminary Considerations* (IMF, 2000a).

⁸ The case of Argentina is not included here. Although in July 2011, Argentina was found in breach of its obligations due to inaccurate reporting of official data for the CPI and GDP (a case that is still under review), the breach did not result in faulty analysis on the part of the IMF, as there has been no Article IV consultation with Argentina since 2006.

public expenditure led to an understatement of 7 percent of GDP in such expenditure, fiscal deficits, and lending by the central bank to the central government in 2001.”

21. The report further notes that “...the deviations from [the 2001 performance criteria] were neither minor nor temporary. On the contrary, they were substantial and long-lasting. Policy actions by the authorities during and immediately after the program to offset the underlying deterioration in the economy were not sufficiently large or quick acting to correct the growing imbalances.”

22. Moreover, the same report indicated that beyond leading to insufficient corrective action, the inaccurate information had “...resulted in a misleading impression of satisfactory performance under the Fund-supported program...” Indeed, as late as November 2001 (IMF, 2001a), the staff was still stating that: “...the fair measure of success achieved in implementing the economic program... [and other actions]... are major achievements for which the authorities are to be commended... the staff welcomes the authorities’ policy response, which is appropriate for consolidating the achievements to date.”

23. A successor arrangement was approved in July 2002. The 2004 report indicated, however, that the “...continued provision of inaccurate information to the Fund distorted the framework under which [the arrangement] was approved.”

Ghana (2000)

24. The completion of the second review of the PRGF program with Ghana was conditioned upon the accuracy of information provided by the Ghanaian authorities regarding the implementation of specified prior actions, including the elimination of external payment arrears. The authorities stated that Ghana had regularized its external payments arrears in early 2000, as agreed in the program. However, soon after completion of the review, the staff learned that external arrears still seemed to be significant. In June 2001, the Board discussed a report on a non-complying disbursement for Ghana (IMF, 2001b); this report confirmed that arrears had actually existed at the time of the August 2000 review and noted that “...the deviation in this case was not minor—arrears were large and had a significant impact on program performance. Had the staff known of the arrears, its assessment of the financing of the program would have been different and may have resulted in different policy recommendations” (IMF, 2000b).

Greece (2009)

25. In October 2009, the Greek authorities disclosed to Eurostat that the government deficit and debt data for 2005–08, and a forecast for 2009, needed to be revised. The revisions, completed in November 2010, were of an exceptional scale and resulted in the government deficit for 2009 moving from 3.7 percent to 15.4 percent of GDP, while the government debt moved from 99.6 percent to 126.8 percent of GDP. The magnitude of the corrections cast doubts on the appropriateness of the economic policies the IMF had advised

in the previous years. There were two pertinent questions: had IMF staff and Eurostat been aware of the weaknesses of Greek statistics; and, if so, had staff sufficiently incorporated this awareness into their analysis?

26. The revisions reflected methodological weaknesses and unsatisfactory technical procedures in the Greek statistical system, but also inappropriate governance as exemplified by lack of clear responsibilities between institutions, diffuse personal responsibilities, and opaque empowerment of officials “which left the quality of fiscal statistics subject to political pressures and electoral cycles” (European Commission, January 2010). The Fund’s report on Breach of Obligations under Article VIII, Section 5 (IMF, 2010) further stated that “the institutional setting at the time failed to ensure the independence and accountability of the National Statistical Service of Greece and other services involved in the production of fiscal data and public debt data.”

27. The problems reported in October 2009 were not new; in fact, both Eurostat and—to a far lesser degree—IMF staff had repeatedly indicated that Greek statistics were notoriously weak and plagued with problems. A 2004 report by Eurostat showed that Greek government deficit and debt figures had been misreported since as far back as 1997, indicating that in none of these years had the deficit been below the Maastricht limit of three percent of GDP. In particular, the deficit figures for 2000 to 2003 were revised upwards by more than two percentage points of GDP for each year, while the corresponding debt numbers were raised by some 7 percentage points of GDP. The 2010 Eurostat report noted that Greek government deficit and debt statistics were the subject of “continuous and unique attention for several years,” that “on five occasions since 2004 reservations [under the Excessive Deficit Procedure (EDP)] have been expressed by Eurostat on the Greek data,” and that “revisions of this magnitude in the estimated past government deficit ratios have been extremely rare in other EU Member States, but have taken place for Greece on several occasions.”

28. Fund staff took a generally approving stance with only occasional expressions of mild concern. Congratulations were offered on the occasion of Greece completing the Fiscal Transparency Report on Standards and Codes (ROSC) in 1999, subscribing to the Special Data Dissemination Standard in 2002, and completing a data ROSC in 2003: “Greece commendably ranks among the few Fund member countries that have completed a self-assessment in relation to the [Fiscal Transparency ROSC]... The staff broadly concurs with the authorities’ assessment... the budget documents are increasingly becoming a comprehensive and reliable statement of government fiscal policy” (IMF, 1999a). On the 2003 data ROSC, staff observed: “Statistics-producing agencies in the main have a legal and institutional environment that supports statistical quality... all agencies demonstrate professionalism and are transparent in their practices and policies... strong laws protecting confidentiality, rules for civil servants, and internal regulations of the central bank provide a clear set of ethical standards for staff” (IMF, 2003b). Even in 2006, the staff was still maintaining a positive line on the Fiscal Transparency ROSC: “Greek budget processes give

assurances of integrity about fiscal data through independent audit and recently strengthened statistical reporting” (IMF, 2006a).

29. In most of the Article IV consultation reports for Greece, staff took the general line of “...data are adequate for surveillance but should be strengthened” (as in the 2006 and 2007 Article IV consultations)—with the exception of the 2004 consultation when, after that year’s Eurostat report, staff stated “...while economic statistics have improved, the inaccurate reporting of fiscal data has hindered surveillance and policymaking, and undermined credibility.” Notwithstanding its generally accommodating attitude, at times staff did indicate concern about the weaknesses of the statistical information, as when it included footnotes in staff reports with cautionary statements such as: “...data have to be interpreted with caution, as they are unusually erratic in Greece and suffer from statistical weaknesses” (IMF, 2003c). Only by 2009, on the eve of the government’s acknowledgment of data deficiencies, did staff take a more forceful line. The Article IV consultation for that year—although still prefacing its assessment with a bland “...some weaknesses...” —included a quite specific and detailed list of failings in Greek statistics and stated in the staff appraisal that “...improving economic statistics deserves high priority...difficulties in reconciling aspects of the fiscal, external and national accounts complicate monitoring, analysis and policymaking...” (IMF, 2009).

30. In all likelihood, and given the magnitude of misreporting over the period, the Fund’s policy advice to Greece would have been different had the accurate data been known. While calls for fiscal consolidation would likely have continued to be part of the advice, the degree of urgency, particularly prior to the 2008 global crisis, would have been stronger. For instance, after the revision in 2004, the staff noted: “The Fund has repeatedly called for a more ambitious fiscal stance, but consolidation stalled in recent years and revisions have revealed that deficits were much larger than reported. Had these numbers been available, staff would have advised a still stronger fiscal effort” (IMF, 2004c).

Hungary (1982–89)*

31. In November 1989, the Hungarian government announced to Parliament that both domestic and external debt had been underreported since the mid-1970s. The Fund’s Board was informally apprised of the situation at the time of the government’s disclosure. Subsequently, extensive staff consultations with the authorities revealed widespread and systematic misreporting of monetary and balance of payments statistics as well as of data on domestic and external debt since 1982 when Hungary joined the Fund, and also a more recent misreporting of fiscal flows. The misreporting had resulted in misspecification of net credit to the government in the program that was supported by a stand-by arrangement approved in May 1988 and revealed that all performance criteria in the program had been breached by a wide margin.

32. In their February 1990 letter requesting a new stand-by arrangement, the authorities stated, “...the Government of Hungary is aware that this request for a new stand-by

arrangement is being considered against the background of serious misreporting of earlier data... [that] there were also serious methodological problems, partly as a consequence of the initial misreporting, as well as in some periods adjustments to show a more favorable external and fiscal position. The Government of Hungary appreciates that such misreporting makes effective monitoring of performance under a stand-by arrangement and of the programmed adjustment impossible..." (IMF, 1990).

33. In its February 2000 review of misreporting cases, the staff indicated that "...the extent and nature of the misreporting was not deemed to be consistent with the granting of a waiver of noncompliance under the Misreporting Guidelines. Specifically, the deviations could not be characterized as either minor or temporary... Hungary's widespread, systematic and substantial misreporting of data clearly resulted in a fundamentally distorted view of the program by the staff... Had the staff been aware of actual first quarter developments, the program would not have been submitted for Board approval with the same quantified criteria. Had correct data been known, it would have at least affected the staff's assessment of the size of corrective actions needed during the negotiations for an extension of the stand-by arrangement" (IMF, 2000a).

Jordan (1996–97)*

34. During Jordan's 1996–98 extended arrangement from the Fund, the authorities provided staff with erroneous information on national accounts and fiscal data. These data were subsequently revised in mid-1998. The revisions indicated that GDP growth had been substantially lower than initially reported—around 1 percent per year instead of 5 percent—and suggested that fiscal revenues could also have been substantially lower than reported. As a result, the budget deficits in both 1996 and 1997 had actually been substantially higher than reported. In 1997, the actual fiscal deficit had remained virtually unchanged from 1996, at 7.7 percent of GDP, instead of declining from 4.6 percent to 3.6 percent of GDP as claimed in the staff report (IMF, 1998a) for the review of the extended arrangement—a decline that the staff had hailed as a "sizable fiscal consolidation."

35. In the program, Jordan's fiscal performance was monitored from "below the line," on the basis only of bank credit to the public sector, without adjusters for non-bank financing. In the event, the higher-than-reported actual fiscal deficits were financed from non-bank sources (mainly the Social Security Corporation)—which, by a failure of program design, were not part of the definition of the program's fiscal performance criterion. As no performance criteria were breached, Jordan did not infringe the Misreporting Guidelines, but its misreporting of GDP information constituted a breach of Article VIII, Section 5.

36. The revisions "had important implications for 1998 projections and fundamentally altered the staff's picture of economic developments and policies" (IMF, 2000a) from what had been described to the Board in April 1998. A year later, in the staff report for the 1999 Article IV consultation, the staff stated: "...these revisions made clear that the data set that

was available until May 1998 had portrayed a fundamentally distorted picture of the state of the Jordanian economy and performance under the extended arrangement...,” that “... the problems with fiscal and national accounts data damaged confidence in the authorities’ ability to adequately monitor developments and react to them...,” and “...until last May the staff was working on the basis of a wrong view of economic developments in Jordan, which had a major impact on the assessment of performance under the previous extended arrangement...” (IMF, 1999b).

Kyrgyz Republic (1996–98)*

37. While under a PRGF arrangement (1996–98), the Central Bank of the Kyrgyz Republic pledged part of its international reserves as guarantees for external loans. As a result, usable reserves at end-1998 were considerably lower than reported in the staff report for the 1998 Article IV consultation (at 2.2 months of imports instead of 2.6 months). The misreporting was not discovered until end-1999.

38. According to IMF staff in a subsequent report (IMF, 2000c), “...the staff is disturbed to have learned that the pledging of a significant part of the Kyrgyz Republic’s international reserves in 1996 and 1997 was not reported to the Fund ...the authorities’ failure to inform the staff at the time goes against the principle of trust between the institution and its members ...the staff’s assessment of the Kyrgyz Republic’s economic situation and its policy advice, which were the basis of the Board’s decisions, could have been different had it been aware of these pledges.”

Mauritania (2001–02)

39. In November 2005, the authorities of the Islamic Republic of Mauritania informed IMF staff that previously provided information relating to performance under a program supported by a PRGF arrangement (1999–2002) had been inaccurate. The authorities supplied a set of revised monetary data covering the period 1992–2004.

40. Already in its report for the 2005 Article IV consultation (IMF, 2005a), staff had expressed concerns about the integrity of Mauritania’s numbers: “...the external audit of BCM’s end-2002 balances was unable to reliably confirm about 85 percent of its foreign reserves... the historic series are hard to reconcile with the revised 2003–04 data, most notably for the inexplicable shifts in income velocity of money and nongovernment savings... unanswered questions on revised and prior data prevented a complete assessment of economic performance and policies. Monetary developments between 2002 and 2004 are difficult to understand and the accuracy of data provided to the Fund prior to 2003, including monetary and fiscal statistics, is still questionable.”

41. Mauritania’s data revisions of late 2005 confirmed the staff’s concerns expressed in the 2005 consultation report that fiscal and monetary slippages might have started earlier than indicated by the authorities at that time. A March 2006 report on non-complying

disbursements noted that “...instead of a large fiscal and monetary expansion in 2003–04 and an associated sudden depletion of foreign reserves, the revised data indicate that significant imbalances and low levels of foreign reserves persisted over many years. The revision of the monetary data at end-2002 is broadly in line with the findings [of the audit] that only about 15 percent of the US\$400 million of gross official reserves reported to the Fund could be reliably confirmed... Growth in monetary aggregates appears to have been substantially underreported for many years, as the revised level of broad money at end-2002 is more than twice the previously reported level. Bank financing of a larger-than-disclosed fiscal deficit [by about 10 percent of GDP] appears to have been the main factor driving the higher monetary expansion... The revised data imply that program performance at end-December 2001 and at end-June 2002 was substantially less favorable than reported at the time of the fifth and sixth review under the 1999 PRGF arrangement” (IMF, 2006b).

Mexico (1994)

42. In December 1994, Mexico slid into a major exchange rate crisis that caught unawares both the Fund staff and financial market participants, and that spread rapidly to other emerging market economies, especially in Latin America. The pressures that precipitated the crisis had been building up for some time, mainly in the form of large and volatile portfolio capital inflows, growing macroeconomic imbalances, a deterioration in the quality of the domestic bank’s assets and, especially, a shortening of the maturity and increasing dollarization of the government’s debt. These developments reached acute proportions after grave political incidents in the early part of 1994 that resulted in large losses of international reserves (offset by correspondingly large increases in the net domestic assets of the Central Bank) and an accelerated dollarization of the government’s short-term debt. IMF staff obtained data on these developments only after several months and at a time when it seemed that the turbulence had subsided. However, information continued to arrive slowly, thus laying the ground for the surprise that came when the crisis erupted in full force in December.

43. Lack of timely key statistical information about economic developments, including in particular data on international reserves and the public debt, had impeded an assessment of, and early warning about, the mounting dangers in Mexico, and prevented timely corrective action. As pointed out by the Executive Board in a report prepared for the Interim Committee in April 1995, “...Information, including basic statistical data, has not always been provided to the Fund by member countries at the right time to permit appropriate monitoring of rapidly changing situations...” (IMF, 1995). And, as expressed by the Fund historian: “...Almost from the moment the crisis erupted, Fund officials realized their ability to assess pre-crisis conditions in Mexico and to try to forestall the crisis had been hampered by the inadequacy of available data...” (Boughton, 2012).

44. The Mexican peso crisis highlighted a shortcoming in Fund surveillance and triggered an intensive effort by the Fund to put in place mechanisms that would facilitate the timely

availability of adequate data and promote their dissemination into the public domain. This culminated in the establishment of the Special Data Dissemination Standard (SDDS) in 1996 and the General Data Dissemination System in 1997.

Russia (1996)*

45. In 1996, while under an extended arrangement, Russia repeatedly provided erroneous information to the Fund. The misinformation related to non-reporting that part of its international reserves were encumbered, and to certain operations that implied the extension of credit to the government by the central bank. “These transactions led variously to the overstatement of liquid international reserves and the understatement of net domestic assets, net credit to government, and the budget deficit. Had these transactions been recorded correctly, several performance criteria during 1996 that had originally been reported to have been met would have been missed” (IMF, 2000a).

46. The misreporting was not discovered until 1999. At that time, IMF Executive Directors “...expressed strong disapproval of the finding that [...the questioned transactions...] meant that the balance sheet of the Central Bank of Russia had in 1996 given a misleading impression of the true state of the reserves and of monetary and exchange rate policies. Without these indirect transactions and the inaccurate reporting of foreign reserves, several purchases by Russia from the Fund in the past could possibly have been delayed” (IMF, 1999c).

Southeast Asia (1997)

47. A financial crisis of major proportions engulfed economies in Southeast Asia in the last quarter of 1997, hitting, in particular, Indonesia, Korea, and Thailand. The crisis was triggered by a sudden deterioration in sentiment by international investors who had grossly underestimated the risks stemming from overheating pressures, pegged exchange rate regimes—which implicitly provided a guarantee of exchange value and encouraged external inflows—lax supervision in the financial system, and banks beset by relationship-based or government-directed lending practices. Added to this were: “...problems of data availability and lack of transparency, which hindered market participants from maintaining a realistic view of economic fundamentals, and at the same time added to uncertainty...” (IMF, 1999b).

48. The data inadequacies behind the Asian crisis centered mainly on international reserves and external debt. As Executive Directors noted: “...the Asian crisis revealed the critical importance of certain data that had not been available, either because the authorities had been reluctant to provide them—such as reserve-related liabilities of the central bank—or because systems did not exist to produce the data in a timely manner—such as private short-term debt. The crisis has also demonstrated that adequate provision of data to the public is important in the promotion of transparency and strengthening market confidence” (IMF, 1998c).

49. In Thailand, where the crisis first appeared, the situation regarding international reserves was obscured, as the authorities had not divulged to the IMF that they had encumbered the reserves by engaging in forward swaps. The reported level of gross reserves was left intact, effectively disguising the extent of the actual losses.

50. At the same time, all three countries revealed problems with reporting their external debt positions: there were no adequate mechanisms in place to capture information about short-term foreign currency borrowing by corporations in Korea, real estate finance companies in Thailand, or banks in Indonesia. In all cases, these borrowers were private sector entities that, relying on an implicit (or assumed) guarantee from the government, borrowed short-term in foreign currency and invested long-term in the domestic market, thereby making large segments of the economy vulnerable to adverse shifts in market sentiment or to a depreciation of the home currency.

Tajikistan (2002–05)

51. Recommending approval of the sixth and final review under Tajikistan's PRGF program on January 2006, IMF staff provided a positive assessment of developments, indicating, *inter alia*, that: "...Tajikistan's macroeconomic performance during the last three years has been strong...The strong fiscal stance has been maintained and monetary management has continued to improve...The authorities should also steadfastly retain the commitment not to grant any additional directed credits...the policy of refraining from contracting nonconcessional government and government guaranteed debt has worked well and should be sustained."

52. This assessment was called into question when, following a November 2007 letter requesting discussions on a new arrangement, the Tajik authorities acknowledged that the central bank (NBT) had been guaranteeing external debt obligations of the cotton sector, thereby pledging almost all of its international reserves as collateral or encumbering them under written guarantees. The NBT had also provided large amounts of off-balance sheet credits to the cotton sector over the 2002–07 period.

53. In a letter to the authorities, the IMF Managing Director stated: "The recent disclosure of new information and data covering 2001–07...warrants a major reassessment of Tajikistan's performance under the three-year PRGF...This is a serious matter, particularly in light of the magnitude of the possible misreporting..." Furthermore, in his report to the Executive Board on the resulting noncomplying disbursements, the Managing Director stressed that "...the provision of inaccurate data to the Fund over the past six years has seriously undermined the credibility of the authorities with IFIs and other donors..." (IMF, 2008).

Ukraine (1996–98)

54. Ukraine continuously misreported the level of its international reserves during 1996–98 while under IMF stand-by arrangements and in the run-up to an extended arrangement that was approved in September 1998. The misreporting involved multiple transactions that impaired the liquidity of the foreign assets involved, including several transactions that aimed at providing foreign currency support to domestic banks or to the government bond market. The most misleading transactions, however, were two “round-tripping operations,” in which central bank deposits in foreign banks were on-lent to domestic banks, which in turn re-deposited the amounts at the central bank, resulting in an artificial increase of the reserves.

55. During the discussions on the program that was to be supported by the extended arrangement, the authorities reported that international reserves amounted to about \$900 million. The staff, aware of problems with these data, believed that some \$600 million was still usable,⁹ and assessed this amount to be sufficient to support the hryvnia’s exchange rate band established in the program. But days before the Board meeting in which the requested arrangement was to be considered, it was revealed that actually up to \$700 million of reserves was illiquid—i.e., leaving usable reserves of less than \$300 million—forcing an impromptu redesign of the program. A supplement to the staff paper on the request for the arrangement stated, “With the new information on Ukraine’s external reserve position, and the pressure in the market, the authorities have had little choice but to move the exchange rate band... In view of the low level of reserves, the staff has reluctantly accepted the reimposition of the export surrender requirements... further modifications of the program might be unavoidable, and the authorities should be ready to implement additional adjustment measures, if necessary” (IMF, 1998d).

56. Besides presenting a case of misleading information resulting in the wrong design of a program, this episode revealed important shortcomings in the internal workings of the Fund and its relations with the country. The misreporting was allowed to continue for years, even under Fund programs and in spite of several alerts about problems with the reserves data. In the turmoil surrounding the Russia crisis of 1998, the approval of the extended arrangement for Ukraine was rushed without allowing time for a proper recalibration of the program. As indicated in the 2005 assessment of the Fund’s program engagement with Ukraine: “Blame had to be shared all around... On the Fund’s side, a willingness to work under rushed and disorganized circumstances and a climate of forbearance to ‘make the programs work’ had played a role in allowing the misreporting to go on for a prolonged period... While the amounts of noncomplying purchases were relatively small, the attitudes that led to the incidents—on the authorities’ side, a cavalier attitude toward complying with program

⁹ Amounts as reported in an audit prepared by the IMF Office of Internal Audit (IMF, 2000d).

undertakings; on the Fund's side, a willingness to cut corners—led to a period of re-assessment of relations” (IMF, 2005b).

Zaire (1985)*

57. In Zaire a program supported by a Stand-By Arrangement and prepared between November 1984 and January 1985 was approved in April 1985 under the belief—on the basis of unaudited data—that Zaire had met the end-March performance criterion on net bank credit to the government. The final audited data, obtained in early May, showed that Zaire had breached that criterion by almost 30 percent of the programmed amount for the first quarter of 1985.

58. IMF (2000a) indicates that “...The misreporting probably led to a fundamentally distorted view of the program by the staff.” Because Zaire had failed to make the last purchase under the preceding stand-by arrangement—as the December 1984 sub-ceiling for bank financing of the government was breached—end-March compliance with that sub-ceiling had presumably been “...an essential element in Management's decision to support Zaire's request for a stand-by arrangement, and the arrangement was not presented to the Executive Board until the authorities had reported the data on this performance criterion to the Fund” (IMF, 1985a). Zaire's non-observance of the credit ceiling was “of particular concern because the program was approved on April 24 with the specific understanding that the performance criteria at end-March were likely to be observed...” (IMF, 1985b).

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