# BACKGROUND DOCUMENT

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# A Review of IMF Exchange Rate Surveillance in 30 Economies, 1999–2005

1. This background document presents a summary of major findings from the IEO's in-depth review of IMF exchange rate surveillance in 30 economies, which was designed to supplement the full review of documents for all countries. As explained below, the 30 economies were selected on the basis of a set of economic indicators as well as consultations with various stakeholders (Table A5.1).

## **Design and Implementation**

- 2. The selection of the economies involved a three-stage process. First, the evaluation team selected the euro area, Japan, and the United States for their systemic importance and the West African Economic and Monetary Union (WAEMU) as the largest of the regional monetary unions among the developing countries.
- 3. Second, the team considered additional economies from a list of 78 economic areas that met two or more of the following criteria, which were thought to identify cases where exchange rate issues might be particularly relevant:<sup>1</sup>
  - Largest multiperiod current account imbalance, both in percent of GDP and U.S. dollars, during 1999–2005 (measured on the basis of rolling, twoyear averages);
  - Percentage change in and coefficient of variation for the real effective exchange rate during 1999–2005;
  - Change in foreign exchange reserves over 1999– 2005, in percentage terms and in relation to the M2 money stock at end-1998;
  - Average trade openness, measured as the sum of exports and imports divided by GDP, during 1999–2005;
  - Exchange rate regime change (based on the IMF Monetary and Capital Markets Department's
- Monetary and Capital Markets Department's

- de facto classification of exchange arrangements);
- De facto dollarization (countries with a score of 10 or more on IMF staff's composite dollarization index).<sup>2</sup>
- 4. Third, the team consulted with IMF staff, members of the Executive Board, and other stakeholders to see if there were additional country cases that could provide significant insights into how the IMF conducts exchange rate surveillance. In finalizing the list of economies for the in-depth review, the evaluation team sought diversity in terms of geography, experience with regime change, and program or technical assistance relationships with the IMF (see Annex A5.1 for the summary descriptive statistics for these economies).
- 5. The 30 economies selected for review can conveniently be grouped on the basis of type of country or exchange rate regime (Table A5.2).<sup>3</sup>
- 6. To give a thorough and consistent treatment to each of the economies, a detailed set of questions was prepared, for which answers were based on all relevant documents for the 1999–2005 period,<sup>4</sup> including communications with the authorities and internal memorandums or analytical documents on issues related to exchange rate policies. Because of the deliberate selection process (and the greater weight of advanced economies and larger emerging market countries in the sample),<sup>5</sup> the evaluation team designed the questions in such a way as to allow a consistency check with the full review. This allowed the team to draw any generalizations from the findings with greater confidence.

<sup>&</sup>lt;sup>2</sup>See "Macroeconomic Policies in Dollarized Economies," SM/03/126, April 2003. The classification is based on data for 1996–2001.

<sup>&</sup>lt;sup>3</sup>The country groups follow the IMF's *World Economic Outlook*, except that "Other emerging market and developing economies" are further broken down by size.

<sup>&</sup>lt;sup>4</sup>Some of these questions, along with coded answers, are reproduced in Annex A5.1.

<sup>&</sup>lt;sup>5</sup>As a simple illustration, coverage of exchange rate issues in staff reports was higher, on average, for the 30 sample economies than for the entire IMF membership (see Background Document 4).

<sup>&</sup>lt;sup>1</sup>For more details, see the IEO issues paper at www.ieo-imf.org/pub/issues.html.

Table A5.1. Economies Selected for Detailed Analysis 1,2

Africa	Asia-Pacific	Europe	Middle East and Central Asia	Western Hemisphere
WAEMU	Australia	Bulgaria	Egypt	Brazil
Guinea	China	Euro area	Morocco	Ecuador
Rwanda	Hong Kong SAR	Iceland	Saudi Arabia	El Salvador
South Africa	Japan	Lithuania		Jamaica
Tanzania	Korea	Norway		Mexico
	Malaysia	Russia		Peru
	Singapore	Ukraine United Kingdom		United States

Iltalicized entities refer to regional monetary unions.

# **Main Findings**

7. The primary objective of the exercise was to identify issues and trends that cut across the 30 economies. In identifying these issues and trends, the review focused on a variety of broad quality dimensions, some of which are summarized below.

### Coverage of exchange rate issues

- 8. For emerging market and developing countries, the analysis focused mainly on competitiveness considerations, while for advanced economies the coverage tended to be richer, with some prominence given to developments in global capital markets and their capital account implications. Exchange rate policy advice per se was given only in 60 percent of the cases reviewed, with half of the remaining cases involving advanced economies with flexible exchange rate regimes.
- 9. In several countries, exchange rate discussions between staff and the authorities were much more intense than suggested by the Article IV reports. For example, detailed discussions on the exchange rate regime took place with little or no documentation in Article IV staff reports or related selected issues

papers. Staff activities in these cases ranged from informal workshops to confidential staff notes and meetings with the authorities and staff exploring a variety of alternative policy options in the process.

10. At the other extreme, hard policy constraints and market or political sensitivities have meant that the authorities in some countries were either hesitant or unwilling to discuss certain policy issues. IMF staff, in turn, have sometimes been unwilling to deal in a substantive way with possibly contentious issues (e.g., exchange rate level, regime choice, or intervention policy), partly in order to preserve the IMF's cooperative relationship with the member country concerned. As a result, certain exchange-rate-related issues remained effectively "off the table," or their treatment appeared to be pro forma with no true engagement—at least for a certain period of time. The review finds that these factors applied for at least five economies, though for different reasons and under different circumstances.

# Integration of exchange rate and other policies

11. An important aspect of IMF analysis of exchange rates concerns the integration of exchange rate policies

Table A5.2. Features of the 30 Sample Economies

	Major Advanced Economies <sup>1</sup>	Other Advanced Economies <sup>2</sup>	Other Emerging Market and Developing Economies		
Exchange Rate Regime (As of 2005)			Large emerging <sup>3</sup>	Other emerging and developing	Total
Independent float	4	4	3	I	12
Managed float		I	2	4	7
Other fixed peg			4	2	6
Currency board		I		2	3
No separate legal tender				2	2
Total (percent of total)	4 (13)	6 (20)	9 (30)	11 (36)	30 (100)

<sup>&</sup>lt;sup>1</sup>Includes the euro area, Japan, the United Kingdom, and the United States.

 $<sup>{}^2\!\!</sup>$  The regions correspond to the geographical jurisdictions of IMF area departments.

<sup>&</sup>lt;sup>2</sup>Includes Australia, Hong Kong SAR, Iceland, Korea, Norway, and Singapore.

<sup>&</sup>lt;sup>3</sup>Includes economies with GDP (PPP basis) of more than \$250 billion.

with measures in other policy areas. For most countries reviewed, integration with monetary and fiscal policies was found to be good overall (e.g., on the monetary policy implications of intervention and sterilization operations, the importance of pass-through effects for inflation and monetary policies, the extent to which exchange rate developments should be factored into monetary policy decision making, and in assessing the effects of debt indexation and fiscal dominance considerations for exchange rate and monetary policies);<sup>6</sup> and, for most countries, there was a good integration of exchange rate policies with structural policies (though with the coverage of mutual implications more vague and less detailed than for other policy areas). Integration was judged to be somewhat lacking relative to financial sector and financial stability issues, though coverage and integration across countries clearly improved over time—and significantly so in the case of those receiving FSAP and related technical assistance missions (e.g., due to better availability of data on financial sector exposures, and a richer knowledge and coverage of institutional detail). This finding is consistent with the IEO's recent FSAP evaluation.7

12. The in-depth review found that the integration of area departments' advice with the internal interdepartmental "vulnerabilities exercise" was well done. This can in part be explained by the structure of the exercise in which area departments play a key role in coming to the final risk assessment for a given country. Even when the initial model-based exercise signaled that a crisis was improbable (due to strong fundamentals), there were cases where area department staff judgments prevailed—both in the vulnerabilities exercise itself and in bilateral surveillance.

13. An area that, despite recent improvements, remains insufficiently integrated is regional and global spillovers.<sup>8</sup> Although substantial progress was found in the treatment of international ramifications of U.S. policies and of possible regional spillover effects from antideflationary measures in Japan,<sup>9</sup> progress was much less pronounced in the treatment of the policies

of other advanced economies. An example of asymmetric treatment is given by the staff reports for the Article IV consultations with the euro area. Although the analysis covered issues such as the implications of a possible disorderly adjustment of the U.S. dollar, there was only limited coverage of the implications of euro area policies for the global economy or individual countries (such as those in Eastern Europe). This was despite exhortations, in the internal review process, to "cover more the Eastern European countries" and to explore "the risks of reversal of the strong capital flows into Eastern Europe" along with any implications of adverse developments in this region for euro area policies. A similar lack of coverage was identified with respect to the regional implications of policies in such countries as Brazil and Russia. In the case of China, the analysis of spillovers focused largely on the regional implications of a possible slowdown in GDP growth, with exchange-rate-related spillovers analyzed only recently—having been mentioned in earlier years.<sup>10</sup>

# Integration of multilateral and regional perspectives into IMF policy advice

14. Multilateral issues were covered in most bilateral surveillance discussions, but not always in depth.<sup>11</sup> Depth of coverage was found lacking even in countries for which multilateral and regional issues were identified as important. Even when global developments and related concerns were addressed, references to such issues may on occasion have been inserted into the staff reports largely for compliance reasons (e.g., in response to comments received in the internal review process), and not because they had been discussed with the authorities in any material way.<sup>12</sup>

15. The IMF's treatment of global imbalances is a case in point. Global imbalances were identified in multilateral surveillance as an issue involving non-G-3

<sup>&</sup>lt;sup>6</sup>An exception concerns the fiscally induced accumulation of net foreign assets—an issue that should be more fully integrated into discussions of intervention policies, broadly defined (see separate section below).

<sup>&</sup>lt;sup>7</sup>See IEO, *Financial Sector Assessment Program* (Washington: International Monetary Fund, 2006).

<sup>&</sup>lt;sup>8</sup>This has been identified as a weakness in IMF surveillance at least since 1999. See J. Crow, R. Arriazu, and N. Thygesen, "External Evaluation of IMF Surveillance—Report by a Group of Independent Experts" (Washington: International Monetary Fund, 1999); also see IEO, *Multilateral Surveillance* (Washington: International Monetary Fund, 2006).

<sup>&</sup>lt;sup>9</sup>Examples include selected issues papers on the United States in 1999 and 2000, based on the IMF's MULTIMOD, which were followed in later years by similar analyses using the Oxford Economic Model (OEM) and the IMF's new multicountry GEM DSGE model. Similar simulation exercises were employed for Japan.

<sup>&</sup>lt;sup>10</sup>See the 2006 selected issues paper on "Implications of Greater Exchange Rate Flexibility in China and Other Asian Emerging Market Economies."

<sup>&</sup>lt;sup>11</sup>Multilateral assessments feed into country-level assessments for about two-thirds of the economies in the sample, which include all but one of the advanced economies.

<sup>12</sup>In the case of Malaysia, for example, where staff had long argued for greater exchange rate flexibility (at least since 1999, though with changing rationalizations), the staff report for 2003 argued that "greater exchange rate flexibility would be consistent with the process of an orderly adjustment of global imbalances." Yet, the reference to global imbalances appears forced and is not backed up by anything in the remainder of the report, while being somewhat at odds with the finding in the same document that the exchange rate is not substantially misaligned. Importantly, global imbalances are neither mentioned in the 2003 briefing paper, nor in that year's back-to-office report, nor in the concluding mission statement, suggesting that the topic did not play a significant role during the consultation discussions with the authorities.

economies as early as 2003,13 and the topic began to appear consistently in Article IV reports for a number of Asian countries in 2003 and for major oil producers in 2005. Coverage of the issue at the individual country level, however, generally lacked depth; any implications did not appear to have been suitably integrated into staff analysis and thus did not discernibly influence the "policy line" for the countries concerned. Policy linkages across countries were not sufficiently pointed out, with cyclical, country-level considerations dominating the (largely unchanged) advice given at the individual country level.<sup>14</sup> During the period, scope for active policy coordination—for example, by making alternative sets of policy recommendations that are conditional on policy actions taken in other countries—was insufficiently exploited, and the IMF failed to take an institutional stance on how to bring about coordinated policy responses.<sup>15</sup>

## **Surveillance of intervention policies**

16. Coverage of intervention policies in staff reports was found to be insufficient for at least five countries in the sample. Incomplete coverage concerned the past intervention episodes of otherwise floating exchange rate regimes (including an assessment of their effectiveness), as well as a failure to assess whether or not intervention activities had been in line with the authorities' stated intentions or whether there had been effects for other countries (including for intervention activities conducted in the context of fixed exchange rate regimes). <sup>16</sup> As a result,

<sup>13</sup>Notably, the September 2003 *World Economic Outlook* featured a discussion of the rapid buildup of foreign exchange reserves in emerging economies, and argued that "an eventual narrowing of the U.S. current account deficit from its present unsustainable level will likely require emerging economies in Asia to share in the adjustment, to prevent an undue burden of adjustment on other countries" (p. 91).

<sup>14</sup>Staff policy recommendations remained essentially unchanged across countries, with two exceptions: changes in the urgency of advice to China (in 2003, a change in the policy line that was not endorsed by the Executive Board) and to the United States (in 2005, where staff suggested earlier and stronger fiscal consolidation as a "downpayment" by the U.S. authorities in efforts to tempt other countries into policy action on global imbalances). Attempts to integrate global imbalances into existing policy advice were limited to pointing out the extent to which this advice was consistent with reducing those imbalances.

<sup>15</sup>Executive Directors began to acknowledge explicitly the cross-country linkages of exchange rate policies in 2003, referring to current account imbalances as a "global issue." A few individual Directors raised concerns in particular country cases over the consistency of these countries' policies from a multilateral perspective. However, it was not until 2004 that Directors began to identify clearly the need for "coordinated action," though without offering concrete ideas on how such action could be brought about in practice.

<sup>16</sup>The in-depth review also identified references to surveillance "pointers" from the 1977 Surveillance Decision in staff reports or internal documents, usually in the context of intervention activity countering "disorderly market conditions." In two country cases,

the staff reports did not always give a clear description of the de facto exchange rate regime, and the IEO identified at least three cases, <sup>17</sup> for which staff's classification conveyed, at least temporarily, a misleading impression of the regime in place. The problem in these and other cases appears at least partly to have been a reluctance to challenge the views of the authorities. <sup>18</sup>

17. An aspect of intervention policies that has received little, if any, staff attention is intervention tactics, that is, the specifics of how intervention is to be implemented, and the extent to which such practice is consistent with the stated intervention goals such as the smoothing of short-term fluctuations. Examples include the practice of covert interventions—an arrangement that limits the effectiveness of intervention through the signaling channel (though not through the portfolio balance and liquidity channels). In discussing intervention policies, moreover, staff have narrowly focused on the use and accumulation of international reserves, and tended not to give full attention to economically very similar activities outside the traditional boundaries of intervention policies (e.g., changes in the net foreign asset positions of government agencies or publicly managed investment funds). However, to the extent that these activities are of substantial size and likely (or intended) to affect the real exchange rate, focusing simply on a country's monetary authorities' interventions does not allow a clear understanding of the effects of any changes in public sector net foreign asset positions.

18. Advice on the related issue of reserves accumulation has been linked to the underlying rationale for such activities, with staff generally supporting accumulation for precautionary purposes. Accumulation in the context of competitiveness considerations did not usually find staff support, except perhaps in cases such as Russia's. About half of the 30 sample

explicit references were made to "one-sided, protracted intervention" in internal documents, neither of which was followed up with the authorities or referred to in the staff reports.

<sup>17</sup>When, for one of these, MCM (then MFD), on the basis of its indicator-based classification approach, suggested that country's de facto exchange rate regime should be reclassified, the area department staff response included the observation that such a reclassification "would be difficult or impossible for the staff to defend" and "would portray the staff as casting doubt on the veracity of policy statements by officials."

<sup>18</sup>Another reason may be the difficulty in applying criteria in the classification of exchange rate regimes, and the lack of guidance on how to treat episodic events. Correlations across different de facto classification schemes that are virtually as low as the correlation for any one of these with countries' de jure classifications. See Jeffrey A. Frankel, "Lessons from Exchange Rate Regimes in Emerging Economies," in *Monetary and Financial Integration in East Asia: The Way Ahead*, ed. by Asian Development Bank (New York: Palgrave Macmillan, 2004).

economies accumulated significant reserves during the evaluation period, especially in more recent years. Their motives included: (1) self-insurance against disorderly market conditions and volatility; (2) intergenerational and Dutch disease considerations (in countries with large natural resources or aid flows); and (3) concerns to maintain international competitiveness and export/industrial performance. Because explicit analysis of an adequate level of precautionary reserves (linked to the exchange rate regime, nature of shocks, and country conditions) is not a standard feature of staff reports, assessments of the appropriateness of such policies have remained highly judgmental and, at times, contentious—including among staff and at the Board level.<sup>19</sup>

#### Issues of data availability

19. In part, lack of reliable intervention data and related information seems to have limited the staff's ability to properly assess intervention activities. Some country authorities were unwilling to share information that is considered confidential. At the same time, in some cases, area department staff appear to have been hesitant to pursue such data issues more forcefully. The desk review identified one case of repeated underreporting of off-balance-sheet activities with a significant impact on the country's international reserves that was not fully apparent from staff reports submitted to the Executive Board. In contrast, in two other cases, reserves-related data issues had been reported to the Board and, on both occasions, received substantial attention during the Board's discussions. In all three cases, the respective problems were subsequently addressed.

### Analysis of exchange rate levels

20. The sophistication of exchange rate level assessments, as indicated by the use of empirical methods, was good overall. Although there was no clear change in sophistication for some two-thirds of the country cases reviewed, important analytical contributions were made for economies including China, the United Kingdom, and WAEMU. The lack of a clear trend in sophistication was also explained by the strong reliance of staff on CGER estimates for those economies covered by that exercise, and by the fact that levels analysis was good at the outset for a substantial part of the sample. Still, the review found one country case (Saudi Arabia) in which there was no analytically based assessment of exchange rate levels over the entire period (1999–2005), and at least four cases (Iceland, Korea, Mexico, and Peru) for which little or no formal analysis—including comprehensive competitiveness assessments—was provided over parts of the period. The lack of analysis contrasted with the fact that formal analysis could have given important inputs into policy formulation.

21. In addition, the review finds that staff did not always explain well how level assessments were made and why particular methodologies were preferred over others; the lack of explanation casts doubts on the results and their usefulness. In the Article IV reports for Malaysia, for example, the staff used various methods over the years to assess the value of the ringgit. Although use of multiple methods is a welcome development, there was often little documentation on the underlying models, thus making it difficult to judge the approaches that had been used and why-specifically in 2003/04, when the chosen methodology relied on deviations from potential output without providing details on the exact nature and time horizon of the underlying equilibrium concept. Likewise, in the case of China, during parts of the 1999-2005 period, the staff repeatedly analyzed renminbi valuations relying largely on econometric estimates of various notions of equilibrium real exchange rates. As noted, while analytical contributions were made in this context, the staff did not fully integrate more conventional indicators of competitiveness (such as data on export volumes, export market shares, and corporate profitability), as well as the size and pace of reserves accumulation, current account surpluses, and rapid productivity growth into its overall analysis of the exchange rate level.

#### Advice on exchange rate regimes

22. Explicit regime advice favoring a change or a significant adjustment was given to 12 economies in the sample, including China, Korea, Jamaica, Russia, and Rwanda. Staff advice was almost entirely in

<sup>&</sup>lt;sup>19</sup>In the case of Russia, for example, staff advice—after intense internal discussions—was subject to a major reappraisal in 2002; a process that started in the context of the 2001 staff report, which had supported "the authorities' aim to limit the pace of the real appreciation of the ruble" by arguing that a fairly stable exchange rate was a "reasonable compromise between pressures for nominal appreciation, the authorities' concern that too rapid an appreciation would jeopardize output recovery, and uncertainty surrounding the recovery in money demand." Internal comments, however, expressed doubts about the consistency of such advice with the Board's Surveillance Decision and with the objective of reducing inflation. Reactions by area department staff revealed differences of opinion among staff on the correct policy line, pointing to Russian concerns about Dutch disease and uncertainties about the ruble's real effective equilibrium value. In the wake of large terms of trade changes, staff eventually advised the central bank in 2003-05 to "subordinate its exchange rate target to the inflation target, by standing ready to scale back interventions whenever inflation exceeds the charted course" and that "increased exchange rate flexibility could no longer be delayed now that fiscal policy is being relaxed if inflationary risks are to be contained.'

the direction of enhanced flexibility, and 8 cases of advice involved the adoption of inflation targeting—at least over the medium term.<sup>20</sup> In all but one case, the exchange rate was either fixed or heavily managed, and in the one case of a nominally floating exchange rate system, staff advised less official intervention.

23. A notable feature of staff advice is its highly conceptual orientation, especially in the initial stages of regime advice. In some cases, advice did not go much beyond listing some of the pros and cons of alternative regime options. In addition, advice appeared motivated by cyclical (rather than structural) factors, such as real or perceived exchange rate misalignments and related inflationary or deflationary developments. Country-specific analysis tended to lag—not lead—advice and staff sometimes failed to pursue alternative policy options (e.g., fiscal policy responses, adjustment of an existing currency basket, or currency realignments). As a result, in at least three of the country cases reviewed (Malaysia, Morocco, and Ukraine), 21 staff advice for

greater exchange rate flexibility initially lacked analytical support, with the rationale for otherwise unchanged policy advice changing over time. Adding to these shortcomings was an undue sense of urgency given to staff's policy advice in two of these cases, which complicated the IMF's communications with the authorities.

24. Lack of attention to detail, particularly in terms of implementation, was also an issue. When advising the authorities to allow more exchange rate flexibility, for example, detail was not always provided on why and how exactly this ought to be done—an issue criticized during the 2001 Board discussions on Jamaica. Issues about the exact nature of staff advice to Jamaica reappeared in later years, when the authorities were advised to adopt a "balanced policy mix" of interest rate action and exchange rate flexibility—to account for any impact on inflation, reserves, and debt dynamics—but without much accompanying detail on the specifics of such a strategy. In the case of Egypt, in January 2003, staff and the authorities did not pay enough attention to ascertaining that the microeconomic preconditions for successful floating, such as a functioning interbank market, had been put in place as previously recommended. Indeed, the IMF had provided technical assistance (TA) on two occasions in 2002, but there was no careful checkup of whether the TA recommendations had in fact been implemented. In the event, an attempted flotation of the currency was aborted when pent-up demand for foreign exchange and open positions on bank balance sheets (which at a broad level had been identified as potential risks) coupled with the lack of sustained support from other policies produced unfavorable exchange rate dynamics.

<sup>&</sup>lt;sup>20</sup>The time period over which inflation targeting could possibly be implemented, however, appeared to be extensive. In Russia, for example, staff recommended in 2003 that the authorities consider moving toward the adoption of full-fledged inflation targeting over the medium term. However, given the relative openness of the Russian economy, relatively high exchange rate pass-through, the authorities' preference for relative exchange rate stability, the continuing importance of administered prices, and the prospect of large swings in capital flows, it appeared unlikely that inflation targeting would soon become a serious policy option, which would require fiscal policy to become the key stabilization tool in a context of strong expenditure demands.

<sup>&</sup>lt;sup>2)</sup>These represent a quarter of the 12 economies from the sample that received advice on their exchange rate regime.

### Annex A5.I

### **Summary Descriptive Statistics for the 30 Sample Economies**

Do reports identify a current "de facto" exchange rate regime or monetary framework? How? Yes (30) No (0) Independent float (12) Managed float/no path (7) Exchange rate regime: Other fixed peg (6) Currency board (3) No separate legal tender (2) Monetary framework: Exchange rate anchor (10) Monetary targeting (4) Inflation (forecast) targets (8) Other (8) 2. Is there any discussion on (real) exchange rate developments? No (0) Do multilateral analyses feed into country-level assessments? Yes (18) No (12) Do any of the key issues identified by the IMF relate to exchange rate regime or level? Regime only (1) Level only (6) Both (21) Other (4) 5. Did the IMF advise a regime change or adjustment? No (18) Have there been changes to the de facto regime over 1999-2005? What was the old regime? Yes (II) No (19) Managed float/no path (2) Independent float (I) Exchange rate regime: Horizontal band (4) Other fixed peg (3) Currency board (I) Monetary framework: Exchange rate anchor (8) Monetary targeting (2) Inflation (forecast) targets (0) Other (I) 7. Is there any formal analysis of regime sustainability or choice? No (20) Have IMF views or advice on the country's regime changed over the 1999-2005 period? Yes (13) No (17) 9. Over the 1999-2005 period, has the real exchange rate been identified as mis- or correctly aligned? Give direction and scope of analysis for the most recent instance. Yes (27) No (3) Direction: Overvalued (7) Correctly aligned (12) Undervalued (8) Detailed analysis (13) Scope: Own results, but no detail (8) Research quoted (4) "Eyeballing" of charts (10) 10. Have there been trends or changes over time in the sophistication of analysis? No change (9) More sophisticated (7) Variation, no clear trend (14) Gotten worse (0) 11. Do IMF documents report any level estimates by the authorities or third parties? Yes (10) No (20) 12. Is there any reference to the "pointers"/procedures in the 1977 Surveillance Decision (e.g., reserve accumulation and interventions)? Yes (10) No (20) 13. Is advice on exchange rates sufficiently detailed to be implementable? No advice or no detail (12) 14. If advice (on regime or level) is provided, is there discussion of alternative policy options? Yes (17) No advice or no options (13) At what frequency is formal analysis on level or regime reported? One-off (6) Regularly (11) Occasionally/issues driven (7) Not at all (6) 16. Is a proposed policy action followed up over various surveillance cycles? No advice or follow-up (4) 17. Overall, have recommended policy actions been carried out by the authorities? No advice or not carried out (13) 18. Is TA requested or offered in the context of IMF advice on exchange rates? No advice or no TA (15) 19. For IMF-supported programs, are exchange-rate-related issues part of conditionality? Yes (8) No program or no exchange rate conditions (22)