SM/09/27
Supplement 2

February 19, 2009

To: Members of the Executive Board

From: The Acting Secretary

Subject: **The State of Public Finances—Outlook and Medium-Term Policies After the 2008 Crisis—Update**

The attached supplement to the paper on the state of public finances—outlook and medium-term policies after the 2008 crisis (SM/09/27, 1/27/09) has been prepared on the basis of additional information and will be discussed in a Board seminar tentatively scheduled for **Friday, February 20, 2009.**

The staff proposes the publication of this paper after the Executive Board completes its discussion, together with a PIN summarizing the Executive Board's discussion.

Questions may be referred to Mr. Horton (ext. 39850), Mr. Kumar (ext. 37771), and Mr. Mauro (ext. 37712) in FAD.

This document will shortly be posted on the extranet, a secure website for Executive Directors and member country authorities.

Att: (1)

Other Distribution:
Department Heads

INTERNATIONAL MONETARY FUND

The State of Public Finances—Outlook and Medium-Term Policies After the 2008 Crisis—Update

Prepared by the Fiscal Affairs Department

In consultation with other departments

Approved by Carlo Cottarelli

February 19, 2009

1. **This Supplement provides new information on financial sector support and fiscal stimulus measures** that has become available since the issuance of the Board paper SM/09/27. The material in this Supplement does not change the conclusions or the policy recommendations in the Board paper.

Financial sector support

2. **New financial sector support measures increase the G-20 average for upfront government financing marginally, from 3.1 percent to 3.3 percent of GDP**. This is due entirely to an increase in the advanced economies from 4.9 percent to 5.2 percent of GDP (the attached Table 1 updates Table 1 in the original paper, and the attached Table 2 updates Table 3 in the Companion Paper). The main changes are noted below, although in most cases they reflect changes in the composition of the support packages and use of non-government funds, without any impact on upfront government financing:

- **Canada** announced an additional purchase of insured mortgage backed securities, and the purchase of securities backed by car leases, leading to an increase in upfront government financing.
- **France** extended more credit to automakers, but since the funds are provided by a state-owned bank, there is no change in upfront government financing.
- **Ireland** announced a 3.7 percent of GDP recapitalization plan for two banks, funded by existing allocation for recapitalization.
- The **Bank of Japan** announced it will purchase stocks held by financial institutions, amounting up to 0.2 percentage point of GDP, but this entails no change in upfront financing.

- **Sweden** announced—on February 3—a plan to recapitalize its banks, mortgage institutions, and credit market companies (up to a maximum of SEK 50 billion, 1½ percent of GDP) financed through the existing Stability Fund.

- The drawdown period for the Special Liquidity Scheme in the **United Kingdom** ended January 31, 2009. The amount drawn was 1 percent of GDP lower than the initial allocation. (Given the specific characteristics of this scheme, estimates of the recovery rate, noted in Table 2, have been revised)[1]. Separately, the Bank of England will introduce the UK Asset Purchase Facility to buy private sector assets amounting to up to 3.4 percent of GDP, financed by the issuance of treasury bills and the Debt Management Office's operations. The net effect of the above two operations is to increase upfront government financing by 2.4 percent of GDP.

- **United States** announced a new Financial Stability Plan (FSP) on February 10, 2009, which includes several new initiatives including Consumer and Business Lending Initiative (CBLI), Public-Private Investment Program (PPIP), Housing Support and Foreclosure Prevention (HSFP), and Capital Assistance Program (CAP). Some of these programs will employ central bank resources and aim at leveraging private funds. However, since no new resources have been requested from Congress up to now, there is no change in upfront government financing.[2]

Fiscal stimulus

3. **New fiscal stimulus measures were announced or authorities provided additional details of their plans.** For 2009, the impact of additional stimulus in some countries is offset by the somewhat smaller-than-anticipated size of the U.S. stimulus package, leaving the average unchanged at 1.4 percent of GDP. For 2010, the average increases marginally to 1.4 percent of GDP. These updates are shown Table 3 below, which updates Table 4 in the Board Paper:

- **Australia** announced a second stimulus package for 2009, largely comprising temporary spending and increasing its stimulus to 2.1 percent of GDP.

- **Brazil** announced an increase in social safety net and housing support spending, raising its stimulus from 0.3 percent to 0.4 percent of GDP in 2009.

---

[1] The revision suggests that the net cost is expected to be less than a third of the gross upfront cost (see Table 2).

[2] The programs are as follows: (a) CBLI: Treasury direct lending increases by $80 billion, concurrently with $720 billion resources from the Federal Reserve; (b) PPIP: Treasury is expected to contribute $100 billion, leveraged through additional private capital; (c) HSFP: $50 billion will be used for new foreclosure prevention efforts; and (d) CAP: Similar to the existing $250 billion Capital Purchase Program (CPP) under TARP, Treasury will continue to help banks shore up capital after undergoing a stress test. The reallocation of funds in FSP changes the composition of financial sector support measures noted in Table 1.

- **France** announced the abolition of the local business tax, with a revenue loss of 0.6 percent of GDP in 2010.[3] This brings the total in 2010 to 0.7 percent of GDP.[4]

- **Indonesia** raised its 2009 package from 1.0 percent to 1.3 percent of GDP. The new package is under consideration by parliament.

- Additional stimulus measures in **Mexico**—including additional investment and social spending—raise the stimulus estimate from 1 to 1.5 percent of GDP in 2009.

- Stimulus by **Saudi Arabia** is estimated to have amounted to 2.4 percent of GDP in 2008, with measures of 3.3 percent of GDP in 2009; and 3.5 percent in 2010.[5]

- The **U.S**. stimulus package passed by Congress is somewhat smaller than the Board paper estimate ($719 billion versus $800 billion), in both cases concentrated nearly entirely in 2009-10, with a small share in 2011.[6] The composition is also different, with lower investment spending, and higher state aid and other forms of spending.

4. **Taking into account the above developments, staff estimates of fiscal balances and debt ratios in the near-term only change marginally**. The table below updates the text table on page 21 of the original paper. For the G-20 countries, the 2008-09 fiscal balances deteriorate by 5.1 percent of GDP, slightly more than the earlier estimate. The estimated debt ratios increase by 0.1 percent of GDP relative to earlier calculations.

[3] On a net basis, some of the revenue loss would be recouped by an increase in corporate income taxes. These effects are not included here.

[4] The amount for 2009 has been adjusted from 0.7 percent to 0.5 percent of GDP, based on more recent information.

[5] Higher headline announcements by the authorities include below-the-line support measures and oil sector investments by Saudi Aramco that will take several years to implement.

[6] The headline amount of the package is $789 billion, which includes a temporary “patch” of $70 billion to provide relief with respect to the alternative minimum tax. This amount was included in previous baseline U.S. fiscal forecasts.

Change in Fiscal Balances and Government Debt in the G-20 1/
(In percent of GDP, difference with respect to previous period)

	2008 (A)	2009 (B)	2008-09 (A+B)
		Fiscal Balance	
Advanced G-20 Countries	-2.3	-3.7	-6.0
Emerging Market G-20 Countries	-0.3	-3.2	-3.5
G-20	-1.5	-3.6	-5.1
		Public Debt	
Advanced G-20 Countries	4.4	10.0	14.4
Emerging Market G-20 Countries	-2.0	1.9	-0.1
G-20	2.0	7.0	9.0

1/ General government if available, otherwise most comprehensive fiscal aggregate reported in the WEO, updated as noted above. Table reports PPP GDP-weighted averages.

5. **Staff has made preliminary estimates of the spill-over that the fiscal stimulus will have on other countries.** This has been done by mapping the type of measure to the import share of investment and consumption spending. The estimated import leakage in 2009 for the G-20 group is approximately 15 percent of the cost of the measures, or 0.2 percent of GDP. The import leakage as a percent of the total stimulus ranges widely, reflecting both country-specific import shares and the nature of the stimulus. The estimate of the average leakage is suggestive of the benefit that would arise if the stimulus is undertaken collectively across countries.

6. **Updated information on long-term government bond yields and spreads is attached** (Figure 1 updates Figure 9 in the Board paper). Compared with the information through January 22, 2009 in the Board paper, yields fell temporarily in some countries (notably, Greece and Ireland), but have since returned to the earlier levels.

Table 1. Headline Support for the Financial Sector and Upfront Financing Need

(As of February 18, 2009; in percent of GDP)

	Capital Injection (A)	Purchase of Assets and Lending by Treasury (B)	Central Bank Support Provided with Treasury Backing (C)	Liquidity Provision and Other Support by Central Bank (D)	Guarantees 1/ (E)	Total (A+B+C+D+E)	**Upfront Government Financing** (A+B+C, unless otherwise indicated)	
Advanced North America								
Canada	0.0	8.8	0.0	1.6	11.7	22.0	**8.8**	
United States	4.0	6.0	1.1	30.7	31.3	73.0	**6.3**	2/
Advanced Europe								
Austria	5.3	0.0	0.0	0.0	30.0	35.3	**5.3**	
Belgium	4.7	0.0	0.0	0.0	26.2	30.9	**4.7**	
France	1.2	1.3	0.0	0.0	16.4	19.0	**1.5**	3/
Germany	3.7	0.4	0.0	0.0	17.6	21.7	**3.7**	
Greece	2.1	3.3	0.0	0.0	6.2	11.6	**5.4**	
Ireland	5.3	0.0	0.0	0.0	257	263	**5.3**	
Italy	1.3	0.0	0.0	2.5	0.0	3.8	**1.3**	
Netherlands	6.2	0.0	0.0	0.0	33.7	39.8	**6.2**	
Norway	0.0	13.8	0.0	0.0	0.0	13.8	**13.8**	4/
Portugal	2.4	0.0	0.0	0.0	12.0	14.4	**2.4**	
Spain	0.0	4.6	0.0	0.0	18.3	22.8	**4.6**	
Sweden	2.1	5.3	0.0	15.3	47.3	70.0	**5.8**	5/
Switzerland	1.1	0.0	0.0	10.9	0.0	12.1	**1.1**	
United Kingdom	3.5	13.8	12.9	0.0	17.4	47.5	**19.8**	6/
Advanced Asia and Pacific								
Australia	0.0	0.7	0.0	0.0	N/A	0.7	**0.7**	
Japan	2.4	6.7	0.0	0.0	3.9	12.9	**0.2**	7/
Korea	2.5	1.2	0.0	0.0	10.6	14.3	**0.2**	8/
Emerging Economies								
Argentina	0.0	0.9	0.0	0.0	0.0	0.9	**0.0**	9/
Brazil	0.0	0.0	0.0	1.5	0.0	1.5	**0.0**	
China	0.5	0.0	0.0	0.0	0.0	0.5	**0.0**	10/
India	0.0	0.0	0.0	5.6	0.0	5.6	**0.0**	
Indonesia 11/	0.0	0.0	0.0	0.0	0.1	0.1	**0.1**	
Hungary	1.1	0.0	0.0	4.0	1.1	6.2	**1.1**	
Poland	0.2	0.0	0.0	0.0	3.2	3.3	**0.2**	
Russia	0.1	0.4	2.9	3.2	0.5	7.1	**0.6**	12/
Saudi Arabia	0.6	0.6	0.0	8.2	N/A	9.4	**1.2**	
Turkey 11/	0.0	0.0	0.0	0.2	0.0	0.2	**0.0**	
Average (PPP GDP Weights)								
G-20	1.9	3.3	1.0	9.2	12.4	27.7	**3.3**	
Advanced Economies	2.9	5.2	1.3	13.7	19.7	42.9	**5.2**	
Emerging Economies	0.2	0.1	0.3	1.6	0.1	2.3	**0.1**	

Source: FAD-MCM database on public interventions. See CP, Chapter II for details.

1/ Excludes deposit insurance provided by deposit insurance agencies.

2/ Some purchase of assets and lending is undertaken by the Federal Reserve, and entails no immediate government financing. Upfront financing is USD 900 bn (6.3 percent of GDP), consisting of TARP (700 bn) and GSE support (200 bn). Guarantees on housing GSEs are excluded. For details, see CP, Chapter II.

3/ Support to the country's strategic companies is recorded under (B); of which 14 bn euro will be financed by a state-owned bank, Caisse des Depots and Consignations, not requiring upfront Treasury financing.

4/ Maximum amount allowed under the legislation; the current amounts are substantially lower. It is a swap arrangement with conservative haircuts.

5/ Some capital injection (SEK50 bn) will be undertaken by the Stabilization Fund.

6/ Costs to nationalize Northern Rock and Bradford & Bingley recorded under (B), entail no upfront financing.

7/ Budget provides JPY 900 bn to support capital injection by a special corporation and lending and purchase of commercial paper by policy-based financing institutions of the BoJ.

8/ KRW 35.25 trillion support for recapitalization and purchase of assets needs upfront financing of KRW 2.3 trillion.

9/ Direct lending to the agricultural and manufacturing sectors and consumer loans are likely to be financed through Anses, and would not require upfront Treasury financing.

10/ Capital injection is mostly financed by Central Huijin Fund, and would not require upfront Treasury financing.

11/ Extensive intervention plans that are difficult to quantify have also been introduced recently.

12/ Asset purchase will be financed from National Wealth Fund; and the government will inject 200 bn rubles to deposit insurance fund financed from the budget.

Table 2. Upfront Gross Fiscal Cost and Recovery Rate
(In percent of GDP, unless otherwise indicated)

	Upfront Government Financing	Recovery Rate 1/		Medium-term Net Cost of Direct Support	
		Point Estimate 2/	95% Interval	Point Estimate	95% Interval
Advanced North America					
Canada	**8.8**	59.7	[37.9, 81.5]	**3.5**	[1.6, 5.4]
United States	**6.3**	49.1	[26.8, 71.4]	**3.2**	[1.8, 4.6]
Advanced Europe					
Austria	**5.3**	54.2	[34.3, 74]	**2.4**	[1.3, 3.4]
Belgium	**4.7**	55.5	[34.7, 76.2]	**2.1**	[1.1, 3.0]
France	**1.5**	48.5	[29.1, 67.9]	**0.8**	[0.4, 1.0]
Germany	**3.7**	54.7	[34.8, 74.4]	**1.7**	[0.9, 2.3]
Greece	**5.4**	47.5	[30.4, 64.5]	**2.8**	[1.9, 3.7]
Ireland	**5.3**	51.9	[28.6, 75.1]	**2.6**	[1.3, 3.7]
Italy	**1.3**	50.4	[31, 69.7]	**0.6**	[0.3, 0.8]
Netherlands	**6.2**	57.7	[37.8, 77.4]	**2.6**	[1.3, 3.8]
Norway	**13.8**	97.7	[53.6, 100]	**0.3**	[0, 6.4]
Portugal	**2.4**	46.6	[30.1, 62.9]	**1.3**	[0.8, 1.6]
Spain	**4.6**	49.9	[31.5, 68.2]	**2.3**	[1.4, 3.1]
Sweden	**5.8**	62.4	[39.1, 85.6]	**2.2**	[0.8, 3.5]
Switzerland	**1.1**	61.4	[39.1, 83.5]	**0.4**	[0.1, 0.6]
United Kingdom 3/	**19.8**	42.9	[25.3, 60.3]	**5.2**	[4.0, 6.4]
Advanced Asia and Pacific					
Australia	**0.7**	62.5	[39.8, 85.1]	**0.3**	[0.1, 0.4]
Japan	**0.2**	50.5	[29.6, 71.2]	**0.1**	[0.0, 0.1]
Korea	**0.2**	58.4	[37.8, 79]	**0.1**	[0.0, 0.1]
Emerging Economies					
Argentina	**0.0**	N/A	N/A	**0.0**	N/A
Brazil	**0.0**	N/A	N/A	**0.0**	N/A
China	**0.0**	30.0	N/A	**0.0**	N/A
India	**0.0**	N/A	N/A	**0.0**	N/A
Indonesia	**0.1**	30.0	N/A	**0.1**	N/A
Hungary	**1.1**	19.4	[7.97, 30.7]	**0.9**	[0.7, 1.0]
Poland	**0.2**	30.0	N/A	**0.1**	N/A
Russia	**0.6**	40.8	[22.9, 58.8]	**0.4**	[0.2, 0.4]
Saudi Arabia	**1.2**	100.0	[51.6, 100]	**0.0**	[0, 0.5]
Turkey	**0.0**	30.0	N/A	**0.0**	N/A
Average for: 4/					
G-20	**3.3**	50.7	[29.5, 71.1]	**1.4**	[0.8, 2.0]
Advanced Economies	**5.2**	50.5	[29.5, 71.4]	**2.3**	[1.3, 3.1]
Emerging Economies	**0.1**	53.2	[28.9, 67.4]	**0.0**	[0.0, 0.1]

Source: FAD-MCM database on public interventions and Staff estimates. See Chapter III for details.
1/ In percent of upfront outlays.
2/ The recovery rate for China, Indonesia, and Poland is assumed to be 30 percent.
3/ The recovery rate for the Special Liquidity Scheme is assumed to be 90 percent.
4/ Weighted by PPP GDP of 2007.

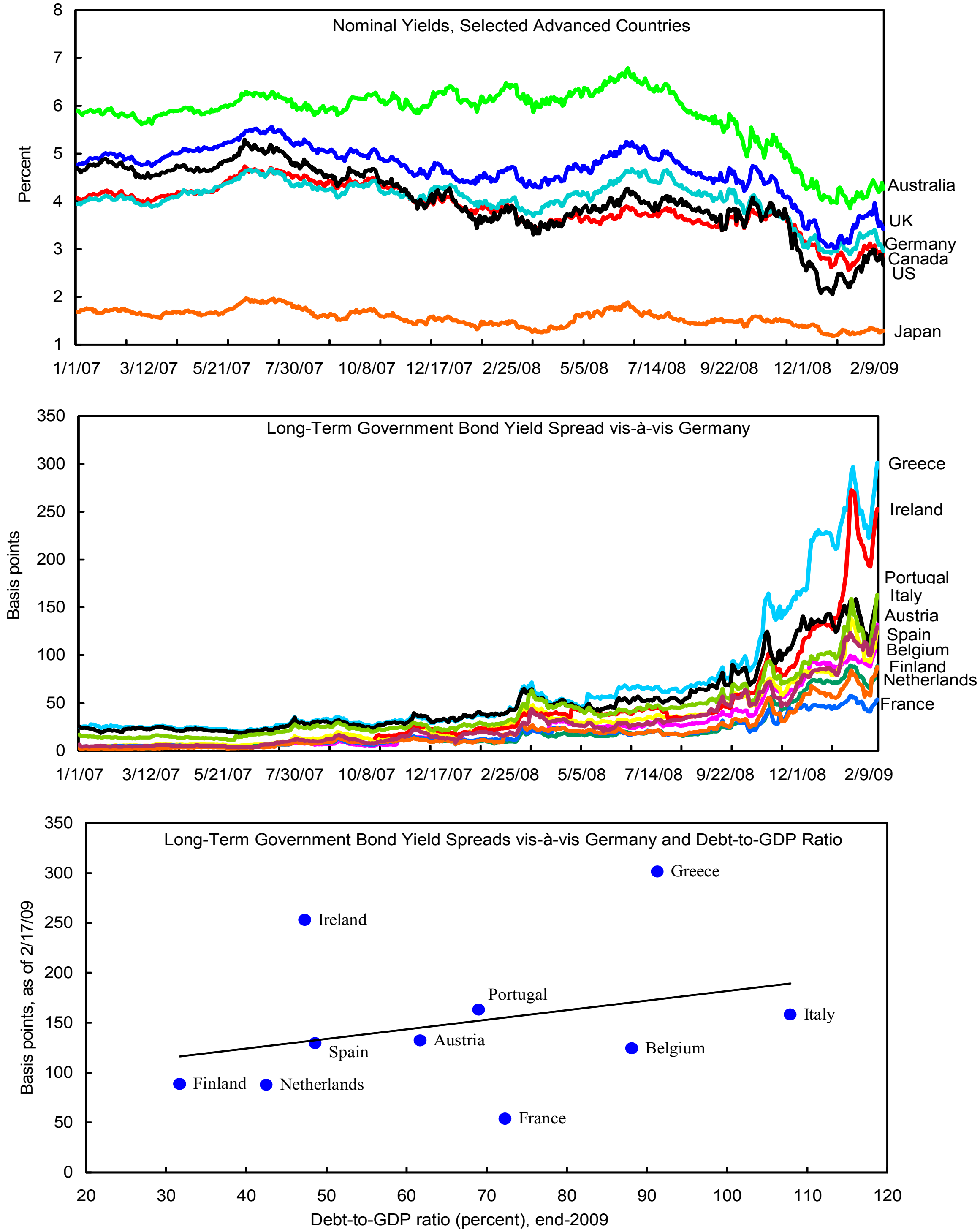
Table 3. G-20 Countries: Estimated Cost of Discretionary Measures, 2008–10

(In percent of GDP)

	2008	2009	2010
Argentina	0.0	1.3	…
Australia 1/	0.7	2.1	1.7
Brazil	0.0	0.4	0.2
Canada	0.0	1.5	1.3
China	0.4	2.0	2.0
France	0.0	0.5	0.7
Germany	0.0	1.5	2.0
India 1/	0.0	0.5	…
Indonesia	0.0	1.3	0.6
Italy	0.0	0.2	0.1
Japan	0.4	1.4	0.4
Korea	1.0	1.5	0.3
Mexico	0.0	1.5	…
Russia	0.0	1.7	…
Saudi Arabia	2.4	3.3	3.5
South Africa 1/ 2/	1.3	1.3	…
Spain	3.1	1.1	0.3
Turkey	0.0	0.0	…
United Kingdom	0.2	1.4	-0.1
United States 3/	1.1	1.7	2.8
Total (PPP weighted average)	0.5	1.4	1.4

Note: Does not include banking-sector support measures.
1/ Fiscal year basis.
2/ Figure shown is an estimate of discretionary fiscal impulse, based on Fund staff calculations.
3/ Excludes losses on financial system support measures in 2009 (according to desk estimates, fiscal costs from these could reach US$503 billion, or 3.5 percent of GDP).

Figure 1. Long-Term Government Bond Yields and Spreads, 2007–09



Source: Sources: WEO database, Bloomberg, and Fund staff calculations.
Notes: 10-year government bonds. Nominal yields in the top panel; spreads vis-à-vis Germany in the middle and bottom panels. In the bottom panel, the slope coefficient is 1.7 (i.e., a 10 percentage point increase in the debt-to-GDP ratio is associated with a 17 basis point increase in spreads). The *p*-value is 0.11.