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CONFIDENTIAL

March 25, 1992

To: Members of the Committee of the Whole on Membership
for the Republics of the Former U.S.S.R.

From: The Secretary

Subject: The Republics of the Former Soviet Union - The Calculation of
Increase in Quota Under the Ninth General Review

The attached note is for consideration by the Committee of the Whole at the meeting scheduled for tomorrow, Thursday, March 26, 1992.

Mr. Roncesvalles (ext. 7800) or Mr. Richards (ext. 7809) is available to answer technical or factual questions relating to this paper.

Att: (1)

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INTERNATIONAL MONETARY FUND

The Republics of the Former Soviet Union - the Calculation
of Increase in Quota Under the Ninth General Review

Prepared by the Treasurer's Department

Approved by David Williams

March 25, 1992

1. At the last meeting of the Committee of the Whole, a number of Directors made references to the increase in quotas of the republics of the former Soviet Union under the Ninth General Review. In the event that they become members before the Ninth Review becomes effective, one Director suggested that the quotas agreed for the republics under the Eighth Review could be increased by the average increase in quotas under the Ninth Review (50 percent) while another Director suggested that the normal formula used in calculating the increase in quotas from the Eighth to the Ninth Review should be followed. This note discusses this issue and also provides an alternative approach that might be considered. A number of illustrative calculations are presented in Tables 1-4.

2. The increases in quotas under the Ninth Review are calculated as follows: Sixty percent of the overall increase is distributed to each member in proportion to its Eighth Review quota and the balance of the increase in the form of the selective element is in proportion to each member's share in the total of the calculated quotas. The "equipropportional" element is thus equal to 30 percent of the Eighth Review quota while the "selective" element will be higher than, equal to, or lower than 20 percent of a member's Eighth Review quota depending on whether its Ninth Review calculated quota share is higher, lower or equal to its share in the Eighth Review quotas. 1/

In applying these procedures for the individual republics, the size of the selective element of each republic's increase in quotas will depend on the share of each republic in the total of calculated quotas under the Ninth Review. The method used to derive the calculated quota under the Ninth Review has not been agreed by the Committee. Consequently, the calculated quota under the Ninth Review has been illustrated from the use of Method II and the same four distribution keys that were used for determining the calculated quotas for the Eighth Review calculations and as indicated in Col. (1) of the attached tables. (The Eighth Review illustrative quotas of

1/ On average, the selective element implies an adjustment of quota share equal to 13.3 percent of the difference between a new member's share in calculated quotas and its corresponding share in Eighth Review quotas.

the individual republics also reflect the adjustments made to the ratios of actual to calculated quotas of each republic so as to equalize their openness ratios with the average for each republic's group of comparator countries). ^{1/} As can be seen from the tables, the size of the calculated quota for each individual republic under the Ninth Review will depend on which distributive key is used under Method II, and the size of the selective element of the increase in quotas under the Ninth Review will vary according to the key used.

The calculations shown in Col. (2) of the Tables are based on the standard procedures of the Ninth Review and, as can be seen, the illustrative share in the Ninth Review quotas of each of the 15 republics falls in relation to each republic's illustrative share in total quotas under the Eighth Review (shown in Col. (1) of each table). This fall in shares arises in part because of the relatively slow growth of the former Soviet economy between 1980 and 1985 and also because the illustrative shares in Eighth Review quotas are high in relation to their shares in Ninth Review calculated quotas, which itself arises in part from the use of the openness ratio as an element in determining the size of the illustrative initial quota under the Eighth Review.

3. As indicated in EB/CW/Qmethodology/92/2, the use of the openness ratio has been developed in the context of providing some possible guidance to Directors in their consideration of a judgmental allowance when finalizing their recommendations as regards the quotas of the 15 republics. Consequently, the illustrative Eighth Review quotas used in making calculations shown in the attached tables reflect an adjustment of the ratios of actual to calculated quotas of each republic so as to equalize its openness ratio with the average openness ratio of its group of comparator countries, using Method II and each of the four distributive keys associated with that method. The same issues arise in connection with the determination of the increase in quotas under the Ninth Review as in connection with determining the illustrative initial quotas under the Eighth Review, in particular the issue of interrepublican trade. Consequently, it is for consideration whether it would also be reasonable to make similar adjustments to the quota calculations under the Ninth Review.

Col. (3) of each of the attached tables shows illustrative calculations in which the selective increase for each republic under the Ninth Review has been adjusted upward by equalizing the openness ratio of each republic to that of the average openness ratio for the group of comparator countries on the basis of Ninth Review data. For this purpose the average relationship of openness to calculated quotas was re-estimated, and for each republic this relationship was used to adjust the share of each republic in the total of calculated quotas so as to equalize its openness ratio with the average openness ratio of its comparators. As can be seen in Col. (3) of each of the attached tables, this technique mitigates the fall in the shares of the

^{1/} The illustrative Eighth Review quotas are shown in Col. (2) of Table 1 and Tables 2-A, 2-B, and 2-C of EB/CW/Qmethodology/92/2, Sup. 1.

republics from the illustrative initial quotas under the Eighth Review to the Ninth Review.

4. At the meeting of the Committee on Friday, March 20, 1992, a Director suggested that to simplify the procedure in adjusting quotas for the republics to take account of the Ninth Review and to obviate the need for consideration of further qualitative judgments, consideration might be given to increase each republic's Eighth Review illustrative quota by a uniform 50 percent, which was the average increase in quotas under the Ninth Review. These illustrative calculations are shown in Col. (4) of each of the attached tables. As can be seen from the tables, this technique would maintain unchanged each republic's share in total quotas under the Ninth Review from its position under the Eighth Review.

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Table 1. Illustrative Quota Calculations under the Ninth Review
with Adjustment of Openness Ratios (Method II - BW Variant)

	Illustrative Initial Eighth Review Quota (II - BW) (1)	Illustrative Ninth Review Quotas		
		Standard Procedures (2)	With Openness Adjustment to Ninth Review	50 Percent Uniform Increase in Quota (4)
			Selective Increases (3)	
(In millions of SDRs)				
Russian Federation	2,948.4	4,252.9	4,341.6	4,422.6
Ukraine	715.1	1,020.4	1,068.8	1,072.7
Belarus	208.1	293.6	309.2	312.2
Uzbekistan	155.5	217.1	228.0	233.3
Kazakhstan	188.3	263.7	276.1	282.5
Georgia	80.7	113.1	117.2	121.1
Azerbaijan	88.9	123.8	127.8	133.4
Lithuania	76.2	106.7	109.9	114.3
Moldova	68.9	95.5	98.6	103.4
Latvia	70.6	97.8	100.7	105.9
Kyrgyzstan	52.8	72.7	74.0	79.2
Tajikistan	49.9	68.6	70.4	74.9
Armenia	56.8	78.0	80.2	85.2
Turkmenistan	39.2	54.1	55.7	58.8
Estonia	37.8	52.3	54.0	56.7
(In percentage shares of total quotas) 1/				
Russian Federation	3.07	2.96	3.02	3.07
Ukraine	0.74	0.71	0.74	0.75
Belarus	0.22	0.20	0.22	0.22
Uzbekistan	0.16	0.15	0.16	0.16
Kazakhstan	0.20	0.18	0.19	0.20
Georgia	0.08	0.08	0.08	0.08
Azerbaijan	0.09	0.09	0.09	0.09
Lithuania	0.08	0.07	0.08	0.08
Moldova	0.07	0.07	0.07	0.07
Latvia	0.07	0.07	0.07	0.07
Kyrgyzstan	0.06	0.05	0.05	0.06
Tajikistan	0.05	0.05	0.05	0.05
Armenia	0.06	0.05	0.06	0.06
Turkmenistan	0.04	0.04	0.04	0.04
Estonia	0.04	0.04	0.04	0.04
Total U.S.S.R.	5.04	4.81	4.95	5.04
Total U.S.S.R. (Including Switzerland)	4.95	4.73	4.86	4.96
(Percentage increase from Eighth Review)				
Russian Federation		44.2	47.3	50
Ukraine		42.7	49.5	50
Belarus		41.1	48.6	50
Uzbekistan		39.6	46.6	50
Kazakhstan		40.0	46.6	50
Georgia		40.1	45.2	50
Azerbaijan		39.3	43.8	50
Lithuania		40.0	44.2	50
Moldova		38.6	43.1	50
Latvia		38.5	42.6	50
Kyrgyzstan		37.7	40.2	50
Tajikistan		37.5	41.1	50
Armenia		37.3	41.2	50
Turkmenistan		38.0	42.1	50
Estonia		38.4	42.9	50

1/ Excluding Switzerland from the total but including the 15 republics in the total.

Table 2. Illustrative Quota Calculations under the Ninth Review with Adjustment of Openness Ratios (Method II - Debt)

	Illustrative Initial Eighth Review Quota (II - Debt) (1)	Illustrative Ninth Review Quotas		
		Standard Procedures (2)	With Openness Adjustment to Ninth Review	50 Percent Uniform Increase in Quota (4)
			Selective Increases (3)	
(In millions of SDRs)				
Russian Federation	2,722.9	3,921.0	4,001.2	4,084.4
Ukraine	780.7	1,116.7	1,171.0	1,171.1
Belarus	230.9	325.9	343.2	346.4
Uzbekistan	196.3	275.6	290.5	294.5
Kazakhstan	222.2	312.9	328.6	333.3
Georgia	98.6	138.3	143.3	147.9
Azerbaijan	105.2	147.0	152.0	157.8
Lithuania	89.3	124.9	128.7	134.0
Moldova	89.1	123.9	128.2	133.7
Latvia	77.8	108.3	111.8	116.7
Kyrgyzstan	75.0	103.5	105.4	112.5
Tajikistan	64.7	89.3	91.8	97.1
Armenia	69.3	95.5	98.3	104.0
Turkmenistan	51.2	71.0	73.3	76.8
Estonia	43.8	60.8	63.0	65.7
(In percentage shares of total quotas) 1/				
Russian Federation	2.83	2.73	2.78	2.83
Ukraine	0.81	0.78	0.81	0.81
Belarus	0.24	0.23	0.24	0.24
Uzbekistan	0.20	0.19	0.20	0.20
Kazakhstan	0.23	0.22	0.23	0.23
Georgia	0.10	0.10	0.10	0.10
Azerbaijan	0.11	0.10	0.11	0.11
Lithuania	0.09	0.09	0.09	0.09
Moldova	0.09	0.09	0.09	0.09
Latvia	0.08	0.08	0.08	0.08
Kyrgyzstan	0.08	0.07	0.07	0.08
Tajikistan	0.07	0.06	0.06	0.07
Armenia	0.07	0.07	0.07	0.07
Turkmenistan	0.05	0.05	0.05	0.05
Estonia	0.05	0.04	0.04	0.05
Total U.S.S.R.	5.12	4.88	5.02	5.12
Total U.S.S.R. (including Switzerland)	5.03	4.80	4.94	5.03
(Percentage increase from Eighth Review)				
Russian Federation		44.0	46.9	50
Ukraine		43.0	50.0	50
Belarus		41.1	48.6	50
Uzbekistan		40.4	48.0	50
Kazakhstan		40.8	47.9	50
Georgia		40.3	45.3	50
Azerbaijan		39.7	44.5	50
Lithuania		39.9	44.1	50
Moldova		39.1	43.9	50
Latvia		39.2	43.7	50
Kyrgyzstan		38.0	40.5	50
Tajikistan		38.0	41.9	50
Armenia		37.8	41.8	50
Turkmenistan		38.7	43.2	50
Estonia		38.8	43.8	50

1/ Excluding Switzerland from the total but including the 15 republics in the total.

Table 3. Illustrative Quota Calculations Under the Ninth Review
with Adjustment of Openness Ratios (Method II - Simple Average)

	Illustrative Initial Eighth Review Quota (II - Simple Average) (1)	Illustrative Ninth Review Quotas		
		Standard Procedures (2)	With Openness Adjustment to Ninth Review	50 Percent Uniform Increase in Quota (4)
			Selective Increases (3)	
(In millions of SDRs)				
Russian Federation	2,874.8	4,142.9	4,228.4	4,312.2
Ukraine	736.2	1,051.8	1,102.4	1,104.3
Belarus	214.7	303.1	319.2	322.1
Uzbekistan	168.9	236.6	249.0	253.4
Kazakhstan	200.1	281.2	294.9	300.2
Georgia	86.2	121.0	125.4	129.3
Azerbaijan	94.5	131.9	136.3	141.8
Lithuania	80.6	112.8	116.2	120.9
Moldova	75.3	104.5	108.1	113.0
Latvia	72.8	101.0	104.2	109.2
Kyrgyzstan	59.7	82.3	83.8	89.6
Tajikistan	54.7	75.3	77.4	82.1
Armenia	61.5	84.6	87.1	92.3
Turkmenistan	42.9	59.4	61.3	64.4
Estonia	40.3	55.8	57.7	60.5
(In percentage shares of total quotas) 1/				
Russian Federation	2.99	2.88	2.94	2.99
Ukraine	0.77	0.73	0.77	0.77
Belarus	0.22	0.22	0.22	0.22
Uzbekistan	0.18	0.16	0.17	0.18
Kazakhstan	0.21	0.20	0.21	0.21
Georgia	0.09	0.08	0.09	0.09
Azerbaijan	0.10	0.09	0.09	0.10
Lithuania	0.08	0.08	0.08	0.08
Moldova	0.08	0.07	0.08	0.08
Latvia	0.08	0.07	0.07	0.08
Kyrgyzstan	0.06	0.06	0.06	0.06
Tajikistan	0.06	0.05	0.05	0.06
Armenia	0.06	0.06	0.06	0.06
Turkmenistan	0.04	0.04	0.04	0.04
Estonia	0.04	0.04	0.04	0.04
Total U.S.S.R.	5.06	4.83	4.97	5.07
Total U.S.S.R. (Including Switzerland)	4.98	4.75	4.89	4.98
(Percentage Increase from Eighth Review)				
Russian Federation		44.1	47.1	50
Ukraine		42.9	49.7	50
Belarus		41.2	48.7	50
Uzbekistan		40.1	47.4	50
Kazakhstan		40.5	47.4	50
Georgia		40.4	45.5	50
Azerbaijan		39.6	44.2	50
Lithuania		40.0	44.2	50
Moldova		38.8	43.6	50
Latvia		38.7	43.1	50
Kyrgyzstan		37.9	40.4	50
Tajikistan		37.7	41.5	50
Armenia		37.6	41.6	50
Turkmenistan		38.5	42.9	50
Estonia		38.5	43.2	50

1/ Excluding Switzerland from the total but including the 15 republics in the total.

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Table 4. Illustrative Quota Calculations under the Ninth Review
with Adjustment of Openness Ratios (Method II - Midpoint of BW and Debt)

	Illustrative Initial Eighth Review Quota (II - Midpoint of BW and Debt) (1)	Illustrative Ninth Review Quotas		
		Standard Procedures (2)	With Openness Adjustment to Ninth Review	50 Percent Uniform Increase in Quota (4)
			Selective Increases (3)	
(In millions of SDRs)				
Russian Federation	2,835.5	4,086.8	4,171.2	4,253.3
Ukraine	747.8	1,068.4	1,119.8	1,121.7
Belarus	219.3	309.5	325.9	329.0
Uzbekistan	175.8	246.2	259.1	263.7
Kazakhstan	205.2	288.2	302.3	307.8
Georgia	89.5	125.5	130.0	134.3
Azerbaijan	97.1	135.5	140.0	145.7
Lithuania	83.1	116.2	119.8	124.7
Moldova	79.1	109.8	113.5	118.7
Latvia	74.0	102.8	106.0	111.0
Kyrgyzstan	64.0	88.2	89.8	96.0
Tajikistan	57.4	79.1	81.2	86.1
Armenia	63.3	87.1	89.6	95.0
Turkmenistan	45.1	62.4	64.4	67.7
Estonia	41.1	57.0	58.9	61.7
(In percentage shares of total quotas) 1/				
Russian Federation	2.95	2.84	2.90	2.95
Ukraine	0.78	0.74	0.78	0.78
Belarus	0.23	0.22	0.23	0.23
Uzbekistan	0.18	0.17	0.18	0.18
Kazakhstan	0.21	0.20	0.21	0.21
Georgia	0.09	0.09	0.09	0.09
Azerbaijan	0.10	0.09	0.10	0.10
Lithuania	0.09	0.08	0.08	0.09
Moldova	0.08	0.08	0.08	0.08
Latvia	0.08	0.07	0.07	0.08
Kyrgyzstan	0.07	0.06	0.06	0.07
Tajikistan	0.06	0.06	0.06	0.06
Armenia	0.07	0.06	0.06	0.07
Turkmenistan	0.05	0.04	0.04	0.05
Estonia	0.04	0.04	0.04	0.04
Total U.S.S.R.	5.08	4.85	4.98	5.08
Total U.S.S.R. (including Switzerland)	4.99	4.76	4.90	5.00
(Percentage increase from Eighth Review)				
Russian Federation		44.1	47.1	50
Ukraine		42.9	49.7	50
Belarus		41.1	48.6	50
Uzbekistan		40.0	47.4	50
Kazakhstan		40.4	47.3	50
Georgia		40.2	45.3	50
Azerbaijan		39.5	44.2	50
Lithuania		39.8	44.2	50
Moldova		38.8	43.5	50
Latvia		38.9	43.2	50
Kyrgyzstan		37.8	40.3	50
Tajikistan		37.8	41.5	50
Armenia		37.6	41.5	50
Turkmenistan		38.4	42.8	50
Estonia		38.7	43.3	50

1/ Excluding Switzerland from the total but including the 15 republics in the total.