Changes in the Export Instability
of Less Developed Countries -
A Dissenting Note

In two recent articles in this Review Lancieri has provided interesting new evidence on export instability. In the earlier article the expansion of the sample of LDCs produced the conclusion "that there was no decline between 1950-61 and 1961-72 in the export instability of developing countries... These results... strongly contradict the results of Lawson who maintained even in 1974: 'it is clear that, between the fifties and the sixties, LDC export instability fell by between a third and a half' ".[1] In re-examining this claim I conclude that his finding does not "strongly contradict" but is consistent with earlier research, for there is evidence of a mild decline even between his sample periods. The decline is much smaller than that reported by previous researchers mainly because of the inclusion of the early seventies in the sample period, and only to a lesser extent because of the extended country sample. Thus I will argue that LDC export instability fell between the fifties and the sixties, but began to grow in the late sixties and early seventies. This places the current stabilisation issue in a consistent historical setting.

On three grounds Lancieri's findings are not directly comparable with those of Lawson (1974). The latter's results came from a sample of 45 LDCs, for the decades 1950-59 and 1960-69, using weighted mean indices, the weights being proportional to the country's share in group exports. Lancieri uses longer periods, 1950-61 and 1961-72, 123 countries and unweighted indices. Not only is no straightforward "contradiction" possible, but also the extension of the time period into the increasingly unstable seventies suggests an explanation of his result. In addition the use of unweighted indices can lead to the overall index being unduly influenced by small but unstable economies. Although his LDC index is 11.7 in both periods, this average masks some interesting trends. Thus 51 countries showed increases, but 71 decreases in instability between the periods. Using the sign test the null hypothesis that there is either no change or an increase in instability can be rejected.[2] Alternatively the median index for 1961-72, 9.3 is six per cent lower than its 9.9 first period counterpart. Finally, using trade shares for 1956 and 1967 as weights, the weighted mean index shows a similar five per cent fall, from 9.8 to 9.3.[3]

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[1] LANCIERI (1978), p. 149 and p. 144.

[2] $Z = -1.72$; see SIEGEL (1956), pp. 68-75 for a description of the test.

[3] Export data from the United Nations *Yearbook of International Trade Statistics*. A detailed examination of this weighted index can be found in LAWSON (1974), p. 57. In

The frequency distribution in Table 1 clarifies the picture. Between the periods the distribution of the problem became more dispersed, a significant fall in the lower tail was partly counteracted by substantial increases for a few countries. So although there is evidence of a fall in LDC instability from Lancieri's data, it is much smaller than suggested by earlier research. Either this is due to extending the sample period, or to the characteristics of the additional 83 countries.

TABLE 1

FREQUENCY DISTRIBUTIONS OF LDC EXPORT INSTABILITY
1950-61 AND 1961-72

CLASS	FREQUENCY	
	1950-61	1961-72
0 - 5	4	16
< 5 - 10	58	54
< 10 - 15	34	29
< 15 - 20	16	11
< 20 - 25	7	4
< 25 - 30	3	4
< 30 - 35	0	1
< 35 - 40	0	1
< 40 - 45	0	1
< 45 - 50	0	1
< 50 - 70	1	1

Source: LANCIERI (1978) Tables 2 and 4.

Of the 45 LDCs in Lawson's paper, 40 remain in Lancieri's list. As they accounted for over half LDC exports in 1972, the additional sample includes rather smaller exporters. In fact 56 of the 61 below median exporters for 1972 are from the additional sample.[4] Moreover while the unweighted average of the original sample calculated from Lancieri's Tables 2 and 4 declines from 10.5 to 9.4, the mean for the extra 83 countries rises from 12.1 to 12.5. Now it is a standard result in this field that export instability and the absolute size of exports are inversely linked. But there is no conclusive statistical evidence that the smaller (below median export) countries had more instability rises between periods ($\chi^2 = 1.28$), nor that the additional sample had a higher than expected proportion of the 50 rises ($\chi^2 = 1.11$).

LANCIERI (1979) some weighted indices are used in presenting new results on agricultural exports. Our criticisms do not cover this later paper.

[4] Data from United Nations, op. cit. The median value of exports for the whole sample was $197 m in 1972.

However it does have a high proportion of those countries with large instability rises. Of those with increases over ten index points, South Vietnam, Cambodia, Laos, Southern Rhodesia and the Falkland Islands all suffered prolonged periods of war or economic blockage, while Mauritania, Libya and the Bahamas had average export growth rates of about 40 per cent. Only South Vietnam and Southern Rhodesia were in the original sample. But the key point is that even if the additional sample had behaved exactly the same as the original, showing a ten per cent decline from 10.5 to 9.4, this would still be considerably less than the earlier results of Lawson (1974).[5] The remainder, indeed the bulk of the discrepancy is due to extending the sample period into the more unstable early seventies.

Thus the original sample was reasonably representative of LDC experience, which was that in the late sixties and especially in the early seventies export instability was rising rapidly back towards the levels it had attained in the fifties. It is partly this relatively recent reversal in previous trends which has rekindled interest in the problem and provided the rationale for the "Integrated Programme for Commodities" of UNCTAD IV.

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REFERENCES

(1) LANCIERI, E., "Export Instability and Economic Development: A Reappraisal", in this *Review*, June 1978.

(2) LANCIERI, E., "Instability of Agricultural Exports: World Markets, Developing and Developed Countries", in this *Review*, September 1979.

(3) LAWSON, C.W., "The Decline of World Export Instability: A Reappraisal", *Oxford Bulletin of Economics and Statistics*, February 1974.

(4) SIEGEL, S., *Nonparametric Statistics for the Behavioural Sciences*, New York: McGraw-Hill, 1956.

[5] From LAWSON (1974) Table 1 and Appendix Table 2 the unweighted means for the 40 countries of the original sample remaining in Lancieri's group show a 40 per cent fall in instability between 1950-59 and 1960-69.