

Growth and Structural Change in Pakistan's

Manufacturing Industry: Reply

by

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1. Gustav Papanek's comments on changes in relative prices among manufactured goods are, indeed, important. As he notes, however, the correction to constant prices would not change the measure of the importance of import substitution in explaining the growth of any given industrial group¹. Also, for the period 1954/55 to 1963/64, the contribution of import substitution to total growth in value added in consumer goods industries is only slightly greater than the contribution of import substitution to growth in value added in all industries (21.0 per cent for consumer goods as opposed to 19.4 per cent for all industries). Increasing the weight of consumption goods industries to reflect changes in relative prices would increase the importance of import substitution in explaining growth in value added in all industries very slightly. For the period 1959/60 to 1963/64 when, according to Dr. Papanek's data, the fall in the relative prices of consumer goods was the greatest, increasing the weight of consumer goods industries would actually reduce the contribution of import substitution to growth in value added for all industries.

2. It is quite correct that we did not adjust value added downward to account for the fact that the CMI includes certain services in value added, and therefore, our value added estimates are somewhat higher than they "should" be. This correction would explain most of the difference between our figures and Papanek's for 1954/55, but it still leaves our estimates about 10 per cent higher than his for 1959/60. This brings us to the problems of levels and rates of growth of value added, and the extent of upward bias in our coverage for later years.

¹ One of the authors has been engaged in a more extensive study of relative prices for some time and hopes to report the results in this *Review* in the near future. Unfortunately, any work with the prices of capital goods, cement, iron and steel, *etc.*, is plagued by the fact that data are relatively hard to come by for these types of products, and such data as do exist are subject to very wide margins of error. For a discussion of this latter point and some of its implications, see Appendix to Lewis [3].

a) It is quite unlikely that we overestimated the level of value added in 1959/60². Hence, if Dr. Papanek prefers his growth rate to ours, we should apply his growth rate to our 1959/60 level, to get the value added for 1954/55. But this would give a higher estimate of value added for 1954/55 than we obtained. In other words we have three interrelated magnitudes: the levels of value added in 1954/55 and 1959/60 and the growth rate over that period. Once we have specified value for two of these, the third is automatically determined. Since we are very confident of our level for 1959/60 the choice is between our growth rate and level for 1954/55 and Papanek's growth rate and a level for 1954/55 which is greater than ours (and his).

b) The assertion that CMI coverage of *registered firms* improved from 1954/55 to 1959/60 does not establish the proposition that CMI coverage of *what should be included* in large scale manufacturing also improved, since it does not establish whether registered factors included a higher or lower proportion of firms that they were supposed to cover in 1959/60 than in 1954/55. Investigations undertaken by the Industry Section of the Pakistan Institute of Development Economics in 1965 indicated that even at that date there was a significant number of large scale manufacturing firms in both wings (and even in the Industrial Trading Estate a few miles from the CSO in Karachi) that were not registered factories, nor did they appear in any of the official statistics. We are not in a position to know whether the coverage of *all* firms has improved or deteriorated over time due to a change from few firms producing simple products to many firms producing diversified products.

c) The fact that our estimate of the growth rate from 1954/55 to 1959/60 differs from other estimates by a greater amount than do the estimates from 1959/60 to 1963/64 is due to a simple fact: after 1959/60 all estimates (CSO, Papanek, and Lewis/Soligo) are based to a large extent on the work of Asbjorn Bergen [1;2] and Wouter Tims [4;5], since there were no censuses available after 1959/60 and all were working from approximately the same set of basic data. For 1954/55 and 1959/60 there was much more diversity in sources. The more uniform growth rates after 1959/60 does not establish any thing about the reliability of our estimates for the earlier period.

² Despite the objection in point 3 of Dr. Papanek's comments that we may have included "too much" in large scale manufacturing by using excise and sales tax data, the contribution of such industries as salt to the 1959/60 adjustment is minute in terms of value added, and can hardly explain the difference in levels.

We did not believe that our original paper had established the last word in value added estimates, but simply that it had given a reasonable set of alternative estimates that raised some questions about the estimates of value added in large scale manufacturing that were under general use, particularly for 1959/60. We do not feel that Papanek's comments dislodge the basic point, which is that upward corrections in the level of output and value added in many industries (and therefore in the aggregate) are justified for several key years. In fact, if the current studies at the Pakistan Institute of Development Economics are correct, it may be that our estimates of the level of value added were much too low, because many firms escaped the measures that we used to correct the level of output.

REFERENCES

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