cent) goes for services and nondurable goods, for which the production response

is generally prompt.17

Even for durables (automobiles, appliances, furniture, etc.), the response lag averages only a fraction of the lag for producers' equipment. In contrast to the latter-produced largely by job-shop methods, much of it specially engineered to the customer's order—consumers' durables are mass-produced in vast numbers, and on short lead times. The feedback from changes in demand is prompt, and the production response relatively rapid.

We shall not attempt a specific estimate of the overall production response lag to tax-induced changes in disposable income, but there can be no doubt that it is but a fraction of the lag for similarly induced changes in the after-tax profits of corporations. By comparison, personal tax changes are quick-acting medicine.

## 4. Conclusion

We are interested here in the technical aspects of corporate and personal income taxes as instruments of contracyclical action, not in their political aspects. We are glad to leave the latter to politicians.

From a technical standpoint, it is evident that the personal income tax offers distinct advantages. In view of the recognition and legistlative lags, of which we spoke earlier, it is highly probable that contracyclical tax action will be taken late—at least in relation to the optimal timing. It can normally be expected to await the actual realization of the conditions it is intended to combat. Under these circumstances there are obvious gains from the use of a tax instrument that minimizes the response lag.

Since it takes several months for corporate tax changes to generate a substantial production response in the capital goods area, and the better part of a year for a complete response, these changes should lead by a substantial interval the attainment of the target conditions. If they do not-and there is practically no chance they will—there is considerable risk that the impact will come too late.18

This may not be serious in the case of stimulative action (there should be time to turn around before the next capital goods boom), but it certainly can be so when the action is restrictive. If it comes in the mature phase of a boom, when capital goods commitments have started down spontaneously or are about to do so, it will only aggravate the subsequent decline in production. Even if the action is reversed as soon as the decline becomes evident (and this is unlikely), it is bound to be too late to prevent unnecessary liquidation.

The moral of this discourse, at the very lease, is that contracyclical tax action should not be employed without careful regard for the lead time involved.

If An exception occurs in the case of farm production, where the response may await the next growing or livestock breeding season. The response in the processing and distribution of existing farm products is of course independent of these lags.

If the season is seed to be season in the processing and distribution of existing farm products is of course independent of these lags.

See Joseph A. Pechman, Federal Tax Policy, p. 60. The Brookings Institution, 1966. We have not mentioned the effect of personal income tax changes on new housing construction (where lead time is longer than for consumers' goods and services), chiefly because this is an area of production dominated by credit policy. Compared with the effects of such policy, any variation in disposable income due to contracyclical tax action (plus or minus 2 or 3 percent) is likely to be of small consequence.

We may add that this risk attaches in substantial degree to the recent suspension of the investment tax credit.

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