

AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D. C. 20523
BIBLIOGRAPHIC INPUT SHEET

FOR AID USE ONLY

Batch 40

1. SUBJECT CLASSIFICATION	A. PRIMARY	TEMPORARY
	B. SECONDARY	

2. TITLE AND SUBTITLE
A note on development as a public good

3. AUTHOR(S)
Winston, G.C.

4. DOCUMENT DATE 1966	5. NUMBER OF PAGES 12p.	6. ARC NUMBER ARC
--------------------------	----------------------------	----------------------

7. REFERENCE ORGANIZATION NAME AND ADDRESS
Williams

8. SUPPLEMENTARY NOTES (*Sponsoring Organization, Publishers, Availability*)
(In Center for Development Economics. Research memorandum no.3)

9. ABSTRACT

(ECONOMICS R & D)

10. CONTROL NUMBER PN-AAC-968	11. PRICE OF DOCUMENT
12. DESCRIPTORS	13. PROJECT NUMBER
	14. CONTRACT NUMBER GSD-736 Res.
	15. TYPE OF DOCUMENT

PAU

coll-736 Res.
PN-AAC-968
Williams

A Note on Development as a Public Good

Gordon C. Winston
Williams College

10p

Research Memorandum No. 3
Center for Development Economics
Williams College
Williamstown, Massachusetts

June, 1966
(Revised)

Developing countries use taxes to generate involuntary saving in support of development programs. As a fact of life, this is almost universally accepted. But, in sharp contrast to the analysis of taxes in advanced countries /6/, this use of the coercive power of the state for growth in poor countries has received little theoretical justification. This paper is intended as a step in that direction.

It is useful to start with the familiar Lewis model because it does not depend on tax generated saving. It depends, instead, on income redistribution and the existence of different relationships between voluntary saving and consumption in different economic classes or other identifiable groups within a society.¹ Growth is achieved through an increase in voluntary saving brought about by income redistribution -- by increasing either the proportion of income flowing through the society's high saving groups or by increasing income inequality, per se.² Recent extensions of the model -- caution on the saving-reducing effects of minimum wage and other "equitable" redistribution policies -- serve to emphasize that this is a mechanism that increases saving through income distribution-induced voluntarism -- a "rigged *laissez faire*."

Since Heller's 1953 article /3/, it has been increasingly acceptable to suggest that a government current account surplus is an alternative to redistribution of income as a source of increased saving. While Heller's further admonitions in favor of neo-classical neutrality

¹Lewis' model has the additional virtue that high saving groups are also those most likely to know of profitable investment opportunities -- capital market functions are internalized in the entrepreneurs of the modern sector /2/.

²Since a less charitable -- and perhaps more accurate -- interpretation of the phenomenon is that the greater the inequality of the distribution of any given income, the greater is the proportion saved voluntarily.

in taxation have been challenged of late /4/, his advocacy of taxes to generate "involuntary saving" is widely accepted as a legitimate function of a developing country's government. So tax generated increases in involuntary saving are a potential alternative to income redistribution when this later is considered noxious on equity grounds. Further, this use of taxation for saving has focused attention on the way that specific tax measures feed back to influence the level of voluntary saving since the net saving effect of a tax -- voluntary and involuntary -- becomes important. One of the most significant claims, for instance, made in behalf of Kaldor's expenditure tax was that it should tend to increase the flow of voluntary saving when compared with an income tax of equal yield /7/.

This recent orthodoxy has become widely accepted. But we might have expected that the idea that the government should use its coercive power of taxation as a source of the saving required for economic development would have been more hotly debated. It is a basic and fundamental issue in the theory of public finance of advanced countries to ask on what grounds a government is justified in interfering with an economy /6/. Yet, curiously, the question has not been systematically considered as an aspect of involuntary saving in underdeveloped countries.

When dealing with taxation in underdeveloped countries, the general question, "Why should the government intervene in the economy and why in this way?" becomes "Why isn't voluntary saving enough for economic growth since it does express extant preferences for future consumption?" The issue, in other words, is whether there exists a logical justification for government taxation increasing involuntarily for economic development? The most important reason for raising the issue is that alternative justifications for such government intervention imply both unique policies and, extrapolating from the theory and experience of

public finance in advanced countries, unique behavior, side effects and repercussions. We should expect very different economic, political and administrative problems to arise, for instance, depending on whether merit wants or political pragmatism justified such government activities. So this paper asks what alternative justifications exist for government use of taxation for involuntary saving to finance economic development and suggests some of their implications.

On the most cynical level, the answer to "why growth through taxation" is simply that economic growth, since it is necessary to keep the masses somewhat content in the modern world of rapid communication, is an essential requisite to retention of political power. And since power is worth the candle always, any government with an instinct for survival will do whatever it can and must to generate some growth. Death and taxes are accepted in a traditional society, so taxation is one of the obvious methods available to increase the rate of growth.³ Taxes for saving for growth then are used pragmatically to forestall revolution.

On the next level, economic growth via government saving can be justified as a merit want. "Merit want" describes an economic good (i.e. one that has positive cost) that an individual would not choose to buy voluntarily but one that he will appreciate having been forced to buy, once he's savored its virtues and satisfactions /6, ch. 1/. The reason the individual does not, at the outset, make what will be the ultimately correct choice, is simply that he does not know enough about the product until he has been forced to consume it; only then can he realize what his ultimate preferences will be. So on grounds of temporal omniscience the government is justified in supplying the good despite the current absence of

³ In order to concentrate on savings I have assumed throughout that there are no limits to absorptive capacity.

an expressed preference for it. In our context, of course, the economic good is development and its cost is the loss of present consumption.

There is a good deal of paternalism implicit in the merit want justification for government intervention. As a third alternative, involuntary saving by taxation can be justified on the ground that someone -- even in a purely democratic setting -- must act as proxy for those as-yet-unborn voters who, if they were given a chance to vote today, would clearly opt for lower present consumption, more economic growth and higher future incomes than do those who actually live, consume, vote -- and are being asked to save -- today. If the government performs such a guardian role for future generations, it can (in fact, must) override people's current preferences.

Different though these last two suggestions are, note that each involves the government in a violation of existing voters' preferences. Were the issue of tax financed growth -- in excess of the rate allowed by voluntary saving -- put to a democratic vote it would soundly be defeated. This lack of popular support for development and its costs, then, would define the (hostile) administrative circumstances of the government's development program. Of course, if growth were a merit want, there would be a popular desire for more of it after forced "consumption of growth" had changed preferences. But this change in preferences would then be reflected in increased voluntary saving so that ex post the change in preferences could not be offered as a justification for continued involuntary tax saving. Interestingly, of the three considered so far, only the justification resting on cynical retention of political power leads to a policy that reflects (or is compatible with) popular democratic preferences.

Fortunately, A.K. Sen has shown that none of these justifications for involuntary saving is necessary /10/. His argument is quite significant. Existing members of society may be willing

to contribute to increasing the income of future generations (which may or may not include some or all of present individuals) by more than that which would be accomplished by present voluntary saving -- the motives may range from pure social compassion to the familiar one of wanting a better life for one's offspring. A single individual, acting alone, of course, is unable discernably to affect income levels in the future except at very high cost to himself. But if he acts in assured concert with his fellow citizens, the cost to him for any given increase in future generation income becomes less because the total cost is shared. It is perfectly reasonable, then, that the individual who, considered in isolation, refuses to increase his own saving voluntarily in order to increase future incomes, may quite rationally and consistently vote to have himself and his fellow citizens forced to increase saving -- to do that which he would not choose to do alone. Sen called this "the isolation paradox." By voting in its favor, the individual votes to coerce others, thereby getting the "product" he desires -- growth of future income -- at a lower cost to himself. It follows, too, that voluntary saving decisions taken for personal motives and considered in isolation will yield less saving (= growth) than the community would choose to have when individual decisions were made with assurance of concerted action.

An illustration may be helpful. It may be worth one dollar to a particular individual to have some future generation enjoy an extra five dollars of income. If the return on saving (= investment) is such that a present payment of two dollars is necessary to assure that much future income, the individual will quite sensibly choose not to pay his dollar voluntarily. This is his rational decision when he considers his own actions in isolation. If, however, he considers himself as part of, say, a fifty man society, and he has the opportunity to vote on the question of whether each of them should be taxed four cents in order to give five dollars

of future income, he will, entirely rationally, vote in favor of the tax. By giving up four cents -- along with other members of society -- he receives something for which he would pay one dollar voluntarily.

Tax supported involuntary saving for economic growth, then, need not be justified as a dubiously paternal merit want nor as the result of a government's generational omniscience. Economic growth is clearly a public good /8/. It has the two characteristics of a public good: (1) if people have a preference for higher future-generation incomes, then growth is communally consumed since each individual gets the satisfaction of expecting higher future incomes -- one man's satisfaction from anticipated economic growth need not reduce another man's satisfaction from the same growth -- and (2) its purchase involves an inherent contradiction between an individual's social and personal incentives.

In showing that socially desirable growth can be a public good that is paid for by taxes, we have raised the specter of social coercion in contrast to voluntary payments because it is always in the interests of a rational individual to avoid making his own payment once such a good is to be provided. If others will pay for this collectively consumed good, his own contribution is so insignificant that he can still have it without having to sacrifice any of his own resources. When the public good is growth, he will vote for society to levy taxes to generate involuntary saving -- because his preferences are such that he is willing to pay the tax (if he has to) to assure higher future incomes. Yet his rationality will also lead him to try to avoid paying his own taxes -- making his own contribution to involuntary saving.⁴

⁴Except for the numbers involved, this is in many ways analogous to the problem of oligopolistic price collusion -- that it always pays an individual firm to support maintenance of monopoly price at the same time that its own price is set below -- this to increase the firm's share of the market.

So a rate of economic growth above that supported by voluntary saving (with or without income redistribution) may be truly desired by a truly democratic community knowingly expressing its preferences. Yet regardless of their expressed preferences in support of the community decision, individuals (and groups) will always have an incentive to act so as to subvert that decision. It is this paradox which, in a number of forms, creates many of the "administrative problems" of economic growth and which lies at the base of some of the more perplexing issues connected with growth.

I have concentrated on taxation since it is the method of meeting the public goods paradox that is clearly most important and most often used in advanced countries. But if the problem is seen more generally as one of securing payment for a public good when there are individual incentives to escape that payment, it is worth going beyond taxation in the narrow sense of a government surplus for economic growth. Taxation (in this limited sense) is only one of the possible methods of taxation (in the broader sense). The public goods conflict between social and individual motives -- the extraction of individuals' payments -- has traditionally been dealt with not only through taxes but also through extra-legal social force and through deception.

While it is not the purpose of this paper to discuss in detail these alternative methods of approaching the public goods problem, it should be noted that these are, in fact, all means of accomplishing the same end of extracting an involuntary payment from individuals whose best economic interests recommend that they do what they can to avoid that payment. Taxes, of course, are the best understood, most easily and often suggested solution, as well as the most direct and most easily recognized -- they depend on the legal coercive power of the state to force payment.

Social pressure is far enough out of the ken of economists that it gets only occasional explicit attention (as when a well known specialist in planning suggested that no recent case of successful development can be found except among countries facing an external national threat that fostered this social cohesion),⁵ yet it clearly may act as a substitute for taxation both in encouraging voluntary payments and in punishing those who would otherwise evade taxation. Social coercion operates by making it too costly in non-economic terms for an individual to follow his otherwise economically rational individualism.

The third device, deception, works primarily through price inflation which reduces real incomes. If the deception is to be successfully practiced, money illusion must mask the fall in real income /11/. Note that each of these devices for real income reduction is applicable, too, to questions of external balance when this rather than aggregate saving is an effective constraint to development /11/.

Finally, a recent proposition about economic growth should be mentioned because it appears to be an alternative justification for government intervention for growth (if not for involuntary saving) and because it has been widely, if informally, discussed of late. If national investment programs embody significant economies of scale (pecuniary externalities) and if saving constrains investment (rather than, say, Balance of Payments), then the present price of future goods will be "too high" and, assuming a positive saving function, levels of present saving and investment would both be increased if savers faced more accurate relative prices (interest rates). In other words, if interest rates were made higher than they are there would be more saving forthcoming. This would allow a higher level of investment which would, in turn, generate scale economies that would justify the higher interest -- a sort of dynamic Say's Law. This, of course, is another example of the kind of failure described by

Scitovsky where the price system cannot reflect what will be but only what is /9/. Then an entirely voluntary response by people facing appropriate relative present and future prices, would increase the level of saving, investment and growth.

It would appear, then, that this -- the inappropriateness of actual price -- rather than something more fundamental, could explain deficiencies in actual rates of growth. Furthermore, there is no present institutional arrangement to correct relative prices as this implies -- to raise the interest rate or lower the prices of future goods. But such an arrangement might be embodied in a reversed hire-purchase scheme (a "purchase-hire" scheme?) as suggested by John Power through which people would be offered a commodity (say a bicycle or a car) for future delivery at a lower price than presently prevails if they will make regular payments (save) for a specified period. Then the expanded investment that these additional savings make possible would allow the production of the promised commodities at the proffered price. And on the investment side, expanded capacity would be justified by these orders for future delivery.

But, despite appearances, even if this were possible there would still exist a public goods problem because (1) the capital productivity assumption must rest on unemployed complementary resources (to capital investment) so there will be income and employment generated by this process and these will accrue to people who don't pay (save) and (b) the Sen phenomenon may still require a rate of growth even higher than that induced by this voluntary purchase-hire scheme. Consideration of the reverse hire-purchase is worthwhile as a way to increase the flow of voluntary saving, but it is not an adequate alternative to government taxation (social pressure and deception) as a primary source of saving.⁶

In summary, if people want economic growth in excess of that supported by purely voluntary saving, growth becomes a public good and some involuntary payments measure, like the use of a government budget surplus to generate involuntary saving through coercive taxation, is necessary. As in the case of any other public good, collective consumption creates a conflict between social and individual motives wherein a rational individual will always try to avoid his own contribution despite his preference for the good registered through voting. This is the reason for the ubiquitous problem of "tax administration" -- the dirty difficulties of real world tax coercion. Both social pressure and inflationary deception can, perhaps critically, supplement the payment-extracting power of the tax system in paying for public goods. Finally, those considerations that rest on an assumed scale economy in investment may recommend involvement of the government in an information function -- adjusting future prices to reflect future shadow prices -- so that present saving and investment decisions can be made more rationally. But such considerations do not, in themselves, resolve the public goods question or offer an alternative to taxes, nationalism or deception.

REFERENCES

1. Davis, Tom E. "Eight Decades of Inflation in Chile, 1879-1959, A Political Interpretation" Journal of Political Economy (August, 1963) pp. 389-97.
2. Gurley, J.G. and Shaw, E.S., "Financial Aspects of Economic Development," American Economic Review, (September, 1955) pp. 515-38.
3. Heller, Walter W., "Fiscal Policies for Under-developed Countries," United Nations Technical Assistance Administration, Taxes and Fiscal Policy in Under-developed Countries, United Nations (New York, 1954) pp. 1-22.
4. Lewis, Stephen R., Jr., "Taxation and Growth in the Dual Economy : An Evaluation of Tax Devices in Underdeveloped Countries," Unpublished PhD dissertation, Stanford, 1963.
5. Lewis, W. Arthur, "Economic Development with Unlimited Supplies of Labor," The Manchester School of Economic and Social Studies, (May, 1954), pp. 139-191.
6. Musgrave, Richard A., The Theory of Public Finance: A Study in Public Economy, McGraw-Hill Book Company, Inc., New York, 1959.
7. Prest, A.R., "The Expenditure Tax and Saving," Economic Journal, (September, 1959) pp. 483-90.
8. Samuelson, Paul A. "The Pure Theory of Public Expenditure," Review of Economics and Statistics, (1954), pp. 387-9.
9. Scitovsky, Tibor, "Two Concepts of External Economies," Journal of Political Economy (April, 1954) pp. 143-51.
10. Sen, Amartya Kumar, "On Optimising the Rate of Saving," Economic Journal (September, 1961) pp. 479-496.
11. Winston, Gordon C., "Money Illusion, Devaluation and Supply Rigidities," Williams College (March, 1966) mimeo.