The group will meet regularly to discuss - in the order given below - selected topics of economic development. Everyone should previously read at least the asterisked items relevant to the scheduled subject. Participants will be asked to summarize and discuss the views expressed in these assignments.

In addition each class member should as soon as possible become really familiar with at least two of the following:

- 1. P. T. Bauer and B. S. Yamey, <u>Economics of Underdeveloped</u>
  <u>Countries</u>, University of Chicago Press, 1957.
- 2. JB. Higgins, Economic Development: Principles, Problems, and Policies, Norton and Co., N. Y. 1959.
- 3. C. P. Kindleberger, <u>Economic Development</u>, McGraw-Hill, N. Y., 1958
- √4. W. A. Lewis, <u>Theory of Economic Growth</u>, Irwin, Homewood, 1955.
- 5. G. M. Meier and R. E. Baldwin, Economic Development: Theory. History. Policy, Wiley, N. Y., 1957.

There will be a short term paper required of each participant. It should be submitted immediately after the Christmas recess. It is suggested that the subject and nature of the paper be discussed with the instructor as soon as possible and before serious work is started on it. 2.500 pp.

. Mr. El ECONOMIC CROWLL AND DEVELOPMENT Economics 319 Proposed Discussion Topics I. Characteristics of Underdevelorment - Aspects of poverty; "dualism"; penetration of the subsistence economy; inefficient tropical agriculture; high birth rates; an uneconomic culture; difficulty of applying national account concepts to backward countries; rising expectations and economic constraints; political pressures and popular fallacies; classification of backward countries. Early Economists and Development Theory - Adam Smith and division of labor, paper money and natural law; Ricardo and gains from trade, diminishing returns, and land scarcity; capital accumulation from surplus value; "Classical" pessimism regarding rising incomes. Innovations and Entrepreneurship - Importance of innovations i III. advanced countries; Schumpeter's theory of development; conditions favoring invention and innovation in advanced and backward countries; capital using and saving innovations;

selecting inventions for innovation; profits as a measure and expeditor of improved resource allocation.

Threat of Population - Typical birth and death rates; effects IV. of birth rate on labor force size; possible meanings of "over-population", measures to increase the ability and desire of couples to limit family size; prospects in some backward countries; Malthusian predictions and the advanced countries; recent economic theories concerning population and development.

V. Agricultural Technology and Land Tenure - The agricultural revolution in advanced countries; tropical "slash and burn" cultivation; livestock in backward countries; cereal cultivation and village life in Asia; peasant attitudes; tenure arrangements where land is scarce; irrigation and fertilizer not panaceas; increasing incentives and scale; "collective" farming.

Agriculture vs. Industry - Ideas that industrialization is development; the politics of the spectacular; assumption that rural labor is "free"; the social overhead cost of associated urbanization; rising incomes and food demands; export possibilities of new industries; why an agricultural surplus is necessary.

Some Models of Macroeconomic Development - Arthur Lewis and VII. "unlimited" supplies of labor; Sir Roy Harrod's equations and their interpretation; Domar's misunderstanding of his own equation; overseas investment included in the models; misuse of capital to output ratios and overemphasis on capital; modified Cobb-Douglas functions as used by Belshaw and Solow.

VIII. Balanced Growth and Big Pushes - Scitovsky and alleged inadequacy of price signalling in backward economies; Rosenstein-Rodan and "internalizing" external economies; Nurkse and retaining consumer expenditures within the economy to provide

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Economics 319 effective demand; Hirshman's critique of the presumed benefits of central planning: common emphasis on supposed psychological and economic discontinuities; the "big Push" proposals of the MIT Center. Accumulation and Use of Capital - Command of a "surplus" as a IX. prerequisite; importance of working capital in a backward economy; direct investment; incentives for private saving and investment; government schemes to mobilize savings; forced saving through inflation; speculation in land; capacity of a country to absorb foreign capital; role of the interest rate under normal conditions; social overhead capital; capital intensive investments in capital poor countries; alleged Pigovian discrepancies justifying government intervention; some proposed investment criteria by Buchannan, Kahn and Chenery. Fiscal Policies and Banking Systems - The limited tax base; search for practicable incentive taxes; distinction between "current" and "capital" budget items; dangers of chronic deficits and monetary inflation; willingness to hold money as a store of wealth; the currency drain in banking systems of backward countries; private or government banking; exchange control and its incidence. XI. Making Use of the World Economy - Antipathy to exporting primary goods; arguments concerning gains from trade; possible ways to mitigate price fluctuations; exports a requirement to borrow; the export burden of repaying loans; import substitutes and semiprocessing; using others' savings; the new autarky. XII. Economics of Health and Education - Human resources as a natural asset; investment in quality of labor; the cost and value of improved public health; education and productivity; social homogeneity through common education; non-money educational constraints; mass or selective education; comparison of "human" investment in backward and advanced countries. XIII. India's Five Year Plans - The Indian economy; difficulties during the Second Plan; bias towards socialism and planning; interaction of the private and public sectors; PL 480 as an offset to deficit financing outline of the Third Plan and resources availability; industrialization for itself; political fear of urban unemployed. Historical Development of Advanced Countries - Rise of the urban middle classes; the new entrepreneurs; the agricultural and industrial revolutions in Great Britain; evolution of money and credit; the joint stock companies; revolution in trans-portation; development of the "empty" lands of North America and Australasia; private international capital movements: migration; exploitation of natural resources for export; economic development without cultural change; Rostow's stages and "take off" concept.

### I Characteristics of Underdevelopment

### Questions

What is meant by an "underdeveloped" country?

Do the following adjectives, when applied to a country, have any economic meaning: Undeveloped, backward, overdeveloped?

What are some of the outstanding characteristics of poor and backward countries?

What is meant by an "uneconomic" culture?

What is "dualism"?

Why are foreign "enclaves" supposed to bring so little benefit to the local economy?

In what ways is the subsistence economy being slowly penetrated?

Why are many national account concepts, as evolved in the advanced countries, often difficult to apply to backward countries?

Why are all the countries within and near the tropics poor, whereas all the advanced countries lie outside the tropics?

Why do so many of the "emerged" people in the underdeveloped countries seem to feel that they can raise consumption levels in short order through government action?

Do the advanced countries in some sense "owe" assistance to the back-ward countries?

Is it realistic to suppose that, relative to advanced countries, the backward countries can become less poor?

#### Readings

Bauer & Yamey, op. cit., Chs. 1-3, 7.

VHiggins, op. cit., Chs. 1, 2, 11.

Kindleberger, op. cit., Chs. 1, 4. √Lewis, op. cit., Chs. 2, 3.

Meier & Baldwin, op. cit., Chs. 13-15.

Clark, C. <u>Growthmanship</u>, Paper No. 10, Institute of Economics Affairs, London, 1960.

Enke, S. & Salera V., <u>International Economics</u> (3rd Ed.), Prentice-Hall New York, 1957, Part VI.

\*Frankel, S. H. "United Nations Primer for Economic Development," being Essay V in The Economic Impact on Underdeveloped Societies, Oxford

University Press, 1953.

Kuznets, S., "Quantitative Aspects of the Economic Growth of Nations,"

Economic Development and Cultural Change, October, 1956, July '57

July '58, and April '59.

Myint, H., "An Interpretation of Economic Backwardness," Oxford Economic Papers, June, 1954.

\*Myrdal, G., Economic Theory and Underdeveloped Regions, Duckworth, London, 1957, Chs. 3, 5, 3300

London, 1957, Chs. 3, 5. Region Backward, or No Income?" Economic Journal September, 1955.

V\*Rottenberg, S., "Income and Leisure in an Underdeveloped Economy,"

Journal of Political Economy, April 1952.

\*Viner, J., International Trade and Economic Development, The Free Press, Glencoe, Ill., 1952, Ch. 6.

<sup>\*</sup>Required Reading

How much "economic development" had Adam Smith already witnessed in Great Britain when he wrote "The Wealth of Nations"?

That are the gains from division of labor?

Is machinery a cause or a consequence of division of labor? Suit a consequence

In what sense is the division of labor limited by the size of the market?

What was Smith's general economic philosophy and how did he probably acquire it?

Why was paper money and bank credit such a marvelous invention in Smith's view?

Under what conditions did David Ricardo consider foreign trade to be profitable?

What was Ricardo's theory of land rent?

Does land have to have differential fertility to earn rent?

Is rent a necessary reward for the use of land under different social circumstances?

What prompted Malthus to write his essay on population?

What were Malthus' positive and providential checks on population?

Did Malthus favor any kind of birth control?

What was surplus value?

Why was it supposed by the classical economists that savings could only come in the long run from surplus value.

What gloomy prospect did most of the early 19th century writers have for economic growth?

#### Readings

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√4iggins, Ch. 3.

eier & Bladwin, Chs. 1, 3.

Blaug, M., Ricardian Economics -- A Historical Sketch, Yale University Press, 1958, Ch. 6.

Hoselitz, B. F. (ed), <u>History of the Theory of Economic Growth: Botero to Keynes</u>, The Free Press, 1960.

McCleary, G. F., The Malthusian Population Theory, Faber & Faber, London, Chs. 2-5.

Malthus, T. R., Essay on Population, 1798: reprinted by Macmillan, London, 1926.

\*Marshall, A., <u>Principles of Economics</u> (8th ed.), Macmillan, 1920, Book VI, Cha. 12,13.

Ricardo, D., Principles of Political Economy and Taxation, 1817; edited by Piero Sraffa with H.M. Dobb, Cambridge University Press, 1951, see chapter On the Rent of Land.

√\*Smith, A., The Wealth of Nations, 1776; Book I, Chs. 1-4: Book III, Chapter 1.

<sup>\*</sup>Required Reading

### III Innovations and Entreprenuership

### Questions

What are the five kinds of innovation mentioned by Schumpeter?
How does Schumpeter explain profits through innovations?
In what respects can Knight's theory of profits include Schumpeter's?
What is the economists' distinction between inventions and innovations?

What are the sources of invention?

In the modern world has the inventor been replaced by group research? What are some of the stages between scientific discovery and commercial innovation?

What is the difinition of a labor "saving" invention? Does the innovating firm then use less labor? Or does the economy?

Do some nations seem to have a comparative advantage in research, but not in development, and conversely?

What is the economic rationale of patents?

In what respects may apprenticeship laws be analogous to patent laws? Why is it sometimes said that labor rather than capital is a brake on innovation?

Must an economy have net investment in order to innovate?

Do innovations determine factor prices or do factor prices select innovations?

Why may new firms be more willing to innovate than established ones? What cultural inhibitions are there to innovation in many backward countries?

Should capital poor countries always prefer capital saving processes? What empiricaldata suggests that technology and innovation have contributed most of the increase in US GNP over the past odd 70 years? Why are aliens often the best entrepreneurs?

### Readings

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Mauer & Yamey, Ch. 7.
Kindelberger, Chs. 5, 10.
Lewis, Ch. 4.
Meier & Baldwin, Chs. 4, 7.

\*Abromovitz, M. Resource and Output Trends in the United States Since 1870, Occasional Paper, 53, National Bureau of Economic Research, N. Y., 1957.

Jewkes, J. Sawers, D., and Stillerman, R., The Sources of Invention, Macmillan, London, 1958.

Schumpeter, J. A., The Theory of Economic Development, Harvard University Press, 1934. Ca III

\*Hicks, J. R., Value and Capital, Oxford, 1939, Ch. 7

Terborg, G., Dynamic Equipment Policy, McGraw-Hill, N. Y., 1949.
Gerschenkron, A., "Social Attitudes, Entrepreneurship, and Economic Development", Explorations in Entrepreneurial History, October 1953.
Eforde, J. S., An International Trade in Managerial Skills, Blackwell.
Oxford, 1957.

√\*Hirschman, A. O., The Strategy of Economic Development, Yale, 1959, Ch. 5,6.

Brozen, Y., "Invention, Innovation, and Imitation", AER, P&P, November 1951.

What is about the maximum possible birth rate?

To what does Lewis attribute the three main drops in the death rate

that have occured in advanced countries?

What are some countries with high rates of population increase?

Why are crude birth and death rates sometimes misleading?

What is meant by the net reproduction ratio?

Thy do high birth rates, rather than high death rates, result in a

large fraction of children in the population? Contrast typical age distributions of advanced and backward nations.

When, assuming no further changes in technology, might a country be said to be overpopulated?

What other objects of economic development are there than maximum per capita income now or over time?

How, assuming international labor migration is restricted, can foreign trade alleviate population pressure?

Why were the classical economists so afraid of population growth? What are some of the reasons that Malthus predictions for Great Britain did not materialize?

Explain the operations of the Nelson population "trap" theory.

To what extent do you think that birth rates are related to (a) the death rate (b) family income per head (c) urbanization (d) emancipation of women (e) culture?

Why does the extended family system make children an asset rather than a liability?

What have governments done in some countries to reduce birth rates?
What might governments do to increase the willingness - as distinct
from the ability - of couples to have fewer children?

How might one go about estimating the value of permanently preventing a birth?

How does population growth increase the capital required to achieve given rates of per capita incomes increase?

### Readings

Bauer & Yamey, ch. 5 VHiggins, ch. 28 "indleberger, ch. 12 Lewis, ch. 6

V\*Belshaw, H., Population Growth and Levels of Consumption, Institute of Pacific Relations, 1956, Part I, ch. 8.

Coale, A. J. & Hoover, E. M., Population Growth and Economic Development in Low Income Countries, Princeton University, 1958.

✓ \*Davis, K., "The Amazing Decline of Mortality in Underdeveloped Areas,"

AER, P&P, May 1956.

Enke, S., "The Gains to India from Population Control," RE&S, May 1960.

\*Enke, S., "Government Bonuses for Smaller Families," Population

Review, July 1960 (See also critique by S. Chandrasekhar in same number.)

Meade, J. E. & Hitch, C. J., "An Introduction to Economic Analysis and Policy," Oxford University Press, 1938, Part IV.

Nelson, R. R., "The Low Level Equilibrium Population Trap," AER, June 1959.

Spengler, J. J. & Duncan, O.D. (ed) <u>Population Theory and Policy</u>, The Free Press, Glencoe, 1956, Ch. 6.
U.N. The <u>Interminants and Consequences of Population Trends</u>, N. York, 1883

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# V - Agricultural Technology and Land Tenure

### Questions

Why are "Western" agricultural practices often not suitable in underdeveloped countries?

What are some of the common objections to using tractors instead of

Why don't more peasants use artificial fertilizers?

What are some of the common land tenure and use arrangements in the Middle East? In latin America? In tropical Africa?

What tenancy arrangements provide the least incentive to better farming?

Where might farmer cooperatives, for financing and marketing, prove practicable?

What are some of the disadvantages of communal agriculture. What are some of the peculiar difficulties of tropical agriculture? Why is selective livestock breeding so unusual in backward countries? What crops have "small holders" successfully produced for market? When are there likely to be important economies of scale in agriculture?

Are any incentive land taxes possible?

How may religious scruples reduce agricultural efficiency? What is the importance of internal transportation to market agriculture?

Is it likely that the marginal product of an hour's labor is zero in many underdeveloped and overpopulated countries?

How might agriculturalists be induced to work harder?

Why do government leaders tend to ignore agriculture in development

What were some of the advances achieved by the agricultural revolution in Western Europe?

Readings

0

Bauer & Yamey, Ch. 14 Kindleberger, Ch. 2 Lewis, pp. 120-136

Barlowe, R., "Land Reform and Economic Development", J Farm Econ.,

✓ Dobyns, H. F., "Blunders with Bolsas", in Underdeveloped Areas (L. W.

Shannon, Ed.) Harpers, N.Y., 1957, pp. 434-444.
Friedman, M., "The Reduction of Fluctuations in the Incomes of Primary Producers", Economic Journal, December 1954.

Holton, R. H., "Marketing Structure and Economic Development" QJE,

Dec. '51.

Jesus Jones, W. O., "Manioc: An Example of Innovation in African Economics" ED&CC. Jan. 1957.

Imarriott, M., "Technical Changes in Overdeveloped Rural Areas", ED&CC

Jan. 1957. Mululudaded area, 7. 41, p. 418-434

Turkey Ed+ C.C. Dec \$2 p. 261-

Nicholls, W. H., "Domestic Trade in an Underdeveloped Country - Turkey JPE, Dec. 1951

Pim, A., "Colonial Agricultural Production", Royal Institute of International Affairs, Oxford, 1946

Schultz, T.W., The Economic Organization of Agriculture, McGraw-Hill N. Y. 1953.

U. N., Land Reform, N. Y., 1951

U. N., Progress in Land Reform, N. Y., 1954.

Warriner, D., Land Reform in the Middle East, Oxford U. Press, 1957.

# Topic VI: Agriculture vs. Industry

#### Questions

Why is development so often identified with industrialization? Is underemployed rural labor a free factor for industry? Distinguish between the marginal productivity of workers and labor: why may the former be zero and the latter positive? Why does industrialization increase the total food requirement? What are the urban overhead costs of industrialization? Can the transformation curve of an economy, as between agriculture and industry, be based on marginal productivities of labor employed in these two occupations? What sort of export industries can backward countries hope to have? Why do poor countries have a low demand for industrial goods? Why might an increase in agricultural productivity decrease the farm population in a rich country and increase it in a poor one? In what respects is innovation "easier" in industry than agriculture? Is a high industrial employment a cause or result of successful economic development?

How does Engel's Law apply to the problem of agricultural and industrial priorities?

What was the classical economists' view regarding the prior necessity of increasing rural and urban output?

What is the effect of the extended family on rural work incentives? How might rural labor be induced to work more? Why have Communist countries always had to use compulsion in

agriculture?

# Readings

Bauer & Yamey, Ch. 14 \*Enke, S., "Industrial Development Through Agricultural Expansion; Review of Economics and Statistics, November, 1961. Fac. 1562 Gutman, G.O. & Black, J., 'A Note on Economic Development with Subsistence Agriculture", Oxford Economic Papers, October 1957.

Higgins, B., "The 'Dualistic' Theory of Underdeveloped Areas", Economic Development and Cultural Change, January 1956.

Johnson, H.G., "Economic Expansion and International Trade",

Manchester School of Economic and Social Studies, Nay 1955.

Machlup, F., "Equilibrium and Disequilibrium: Nisplaced Concreteness and Disguised Politics", EJ, March 1948. Montias, J.M., "Balanced Growth and International Specialization:

A Diagrammatic Analysis", Oxford Economic Papers, June 1961. V\*Rottenberg, S., "Income and Leisure in an Underdeveloped Economy", JPE. April 1952.

Scitovsky, T., "Growth - Balanced or Unbalanced", in The Allocation of Economic Resources, Stanford University Press, 1959. ✓ \*Singer, H.W., "Problems of Industrialization of Underdeveloped Countries", in Economic Progress (L. H. Dupriez, ed.), Louvain

UNESCO, (Meade, M.) "Cultural Patterns and Technical Change", Paris, 1953.

United Nations, "Progress in Land Reform", N. Y., 1954. \*Enhe, S. "Food Courtraint..." SEJ april 1961

# VIII: Some Models of Macroeconomic Development

#### Questions

How does Lewis distinguish between his "first" and "second" stage? What determines the wage at which labor is in "unlimited" supply? In what respects is Lewis first stage reminiscent of classical views? What does Lewis assume regarding the variability of factor proportions in his first stage?

Does Lewis include the possibility of using more capital in agri-

hat are Galenson and Leibenstein trying to maximize? Is the Galenson-Leibenstein model like Lewis' first or second stage? In what respects does the Galenson-Leibenstein model seem too rigid? How are the models of Harrod and Domar similar and different? What is the difference between a gross and net incremental capital to output ratio?

Under what conditions can labor costs sensibly be excluded from comparisons of alternative investment projects?

How, if all real costs are included, can extra output to extra capital ratios be distinct from the marginal efficiency of capital?

Why does Domar feel that his ris not the reciprocal of the average intraplant capital to output ratio?

Should a country seek to maximize gross domestic product or gross income?

hat has been the traditional recourse of nations that save more than they invest physically at home?

How can the Domar's equation be modified for an open economy? In what way would a domestic subsistence economy alter the Domar equation?

low would you include an increased labor force in a growth equation? low do development agencies frequently misuse ICOR's? That are some of the peculiarities of the Cobb-Douglas function? low might diminishing returns to land be represented in a C-B function? That are some of the ways of reflecting technological advances in a growth equation?

That do you think are the seven most important relations to include in any growth model of an open economy?

# Readings

Higgins, Ch.6 ier & Baldwin, Ch. 5

✓ Belshaw, H., Population Growth and Levels of Consumption, Institute of Pacific Relations, 1956, Part II.

Bruton, H. J., "Growth Models and Underdeveloped Countries," JPE, Aug. 55.

Bauer, P.T., "Lewis' Theory of Economic Growth," AER, Sept. '56. V\*Domar, E. D., "Expansion and Employment," AER, Nov. 1947.

Galenson, W. & Leibenstein, H., "Investment Criteria, Productivity, and Economic Development," OJE, Aug. 1955

Harrod, R. F., "An Essay in Dynamic Theory," EJ, March 1939.

\*Lewis, W. A., "Economic Development with Unlimited Supplies of

Labour, "Manchester School, May 1954: ibid., "Unlimited Labor -Further Notes, Manchester School, Jan. 1958.

Meade, J.E., "A Neo-Classical Theory of Economic Growth, Allen & Unwin London, 1961, Chs. 2&3.

Solow, R., "A Contribution to the Theory of Economic Growth," QJE, Feb. 1956.

### Topic VIII: Balanced Growth and Big Pushes

### Questions

What is meant by "balanced" growth in economic development literature? What is Nurkse's problem of the shoe factory?

How does one "internalize" external economies (and diseconomies) through a 'big push"?

How does Hirschman justify his plea for "unbalanced" growth? Why does Scitovsky doubt the accuracy of price "signals" in poor nations?

To what extent is the assumption of discontinuities (or "lumpiness") necessary and/or sufficient to Rosenstein-Rodan's "big push" case? Would an open economy have the same need for a "big push" as a closed one?

That are some of the practical difficulties - other than lack of funds - that prevent a "big push"?

How is it that a country has a limited ability to absorb capital? What are Rostow's three requirements for self-sustaining growth? How does Rostow define or identify the "take-off" period?

Are Rostow's historical examples typical of backward countries today? What assumptions underlie Rostow's minimum requirement of 10 per cent annual income invested?

What sort of growth model is Rostow implicitly accepting? How is "balance" maintained in an advanced free enterprise economy?

Readings √ Higgins, ch. 16. Kindleberger, ch. 9.

Arndt, H. W., "External Economies in Economic Growth," Economic Record, November 1955.

Chenery, H.B., "The Role of Industrialization in Development Progress; AER, PoP, 1954.

VEnke, S. "Food Constraints in Industrial Development in Poor

Countries, "SEJ, April 1961 Fleming, M., "External Economies and the Doctrine of Balanced Growth," EJ, June 1958.

✓\*Hirschman, A.O., The Strategy of Economic Development, Yale, 1959,

Leibenstein, H., Economic Backwardness and Economic Growth, N.Y., '57 Millikan, M.F. & Rostow, W.W., A Proposal: Key to an Effective Foreign Policy, Harpers, N.Y., 1957.

North, D.C., "A Note on Professor Rostow's 'Take-Off' Into Self-Sustained Economic Growth, " Manchester School ..., January 1958. √ \*Nurkse, R., "Some International Aspects of the Problem of Economic

Development", AER, May 1952

Rosenstein-Rodan, P.N., "Industrialization of Eastern and Southeastern Europe," EJ, June-September 1943.

√ \*Rostow, W.W., "The Take Off Into Self-Sustained Growth," EJ, March

V Scitovsky, T., "Two Concepts of External Economies," JPE, April 1954.

### Topic IX: Accumulation and Use of Capital

questions When is a "surplus" necessary for real capital formation? What are the main determinants of interest rates? Under what circumstances might interest rates be zero? What is capital saturation? Distinguish capital goods, capital funds, and capital values. What is the difference between fixed and circulating capital? In what sense are wages paid out of "capital"? Whom does a decrease in depreciation on fixed capital benefit? Are there advantages to having all investment "monetized"? How does deficit financing create forced saving? by do investors in many poor countries want a quick turnover? is it regrettable that so much "investment" is in land speculation? What data suggest that many of the poorest countires do not suffer from a capital shortage but rather from an inability to absorb capital? low is the interest rate a guide to investment planners? When are government's views on time preference likely to be "best"? Explain why government investment decisions are not independent of government price policies. Should government industrial projects charge competitive prices, minimum prices that will repay the investment, or what? Contrast the investment criteria of Buchanan, Kahn, and Chenery.

Readings Rauer and Yamey, Chs. 9, 10, 13 Mindleberger, Chs. 10, 15 Lewis, Ch. 5

Meier and Baldwin, Ch. 16 Abramovitz, M. (ed.) "Capital Formation and Economic Growth," National Bureau of Economic Research, Princeton, 1956: see Part I by Simon Kuznets.

martya Kumar Sen, "Choice of Capital Intensity Further Considered,"

QJE, Aug. 1959. ubrey, H.G. "Investment Decisions in Underdeveloped Countries," Capital Formation and Economic Growth, Princeton, 1955.

V\*Chenery, H.B., "Application of Investment Criteria," QJE, Feb. 1953. Sac Kalm.

Domar, E., "Depreciation, Replacement, and Growth," EJ, March, 1953.

Eckstein, O., "Investment Criteria for Economic Development and the

Theory of Intertemporal Welfare Economics," QJE, Feb. 1957.

Tisher, I., The Theory of Interest, selected chapters.
Lenson, W. & Leibenstein, H., "Investment Criteria, Productivity, and Economic Development," QJE, August 1955.

√\*Hirschman, A. O., The Strategy of Economic Development, Yale, 1959, Chs. 5,6.

Hirschman, A. O., "Investment Policies and 'Dualism' in Underdeveloped Countries, AER, Sept. 1957.

Hotelling, H. The Relation of Prices to Marginal Costs in an Optimum System, Econometrica, April 1939.

System, Econometrica, April 1939.

V\*Kahn, A.E., "Investment Criteria in Development Programs," QJE, Feb. 1951. Sporish: Reside de desamble economic, sulicionale 1951.

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Nurkse, R., Problems of Capital Formation in Underdeveloped Countries, Oxford University Press, 1953, Ch. 2-6.

Swan, T.W., Economics Growth and Capital Accumulation, " Economic Record, XXXII.

### X Fiscal Policies and Banking Systems

#### Questions

What are main sources of government finance? When are tax surpluses likely to constitute net investment? Why are most private savers reluctant to buy government bonds? What happens when government deficits are financed by the banks? Why are customs duties often important in backward countries? What are some of the pros and cons regarding a commutable poll tax? Which taxes may least deter productive contributions of taxpayers? What are some of the difficulties of having a "current" and "capital" budget?

Why have turnover taxes been used in backward countries? Could government subsidize interest rates to increase private investment?

Why are so few payments made by cheques in backward countries? What is a currency drain? A clearing house drain? A legal reserve

How does an extreme currency drain affect central bank control of credit?

How does the absence of a local capital market affect credit control? Are traditional controls of the FRB and Bank of England applicable to credit manipulation in backward countries?

What would happen if say the central bank of Bolivia attempted to contract credit by selling securities on the local money market? What is to be said pro and con making private bank notes legal tender except for settlement with other banks?

What are the criteria of a good money and banking system?

#### Readings

√Higgins, Chs. 20, 21

Kindelberger, Ch. 11. \*Bernstein, E. M. & Patel, J. G., "Inflation in Relation to Economic

Development", I.M.F. Staff Papers, November 1952.

Gurley, J.G. & Shaw, E.S., "Financial Aspects of Economic Development," AER, Sept. 1955.

Hicks, U.K., "The Search for Revenue in Underdeveloped Countries,"

Revue de Science et de Legislation Financieres, Jan-March, 1952.

\*\*Hollow W. "Figuel Policies for Underdeveloped Formaries", "Toront. \*Heller, W., "Fiscal Policies for Underdeveloped Economies", Taxes and Fiscal Policies in Underdeveloped Countries, U.N., New York

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Kaldor, N., <u>Indian Tax Reform</u>. \*Sayers, R.S., <u>Modern Banking</u>. (3rd Ed.) Oxford Univ. Press, 1951,

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New York, 1955. Wallich, H.C., "Underdeveloped Countries and the International : Monetary Mechanism", in Money, Trade, and Economic Growth, Macmillan, N.Y., 1951.

What are some political prejudices against use of the world economy? What reasons are there for the colonial stigma attached to exports? Do governments of backward countries wish to increase domestic national product at the expense of national income - what is the difference?

In what ways do foreign direct investments benefit the "receiving" country?

Are there any ways in which direct foreign investors can be forced to train native supervisors and technicians?

What are some of the considerations that should influence a government in taxing a major export?

What can government do to mitigate the fluctuating prices of primary

Is it necessary to diversify, and attain a lower mean income over time, in order to diminish year to year fluctuations?

What arguments have been advanced that "prove" that primary producing countries must suffer a worsening of their long run terms of trade?
How do exports finance, or at least "attract", capital inflows? In what sense is private international finance a "confidence" game? How does the import propensity of a country affect the economic burden of servicing borrowings from abroad?

What are the kinds of activities that a "would-be" industrial country can best undertake as a start?

How does domestic inflation tend to dry-up exports?

In what ways does international trade remove some of the supposed difficulties of attaining "Balanced" growth?

When are immigrants an asset and when a liability?

What are the inherent problems of international commodity agreements?

Keadings

Higgins, ch. 24, 25

Kindleberger, ch. 14, 15

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For what reasons might anyone wish to know a person's capital value? Should a person's capital value be based on the marginal product minus the average consumption of his class of people, or upon marginal product minus marginal consumption, or what?

Why might the capital value of an infant be negative?

Why have economists during the past hundred years been so uninterested in human capital values.

Should educational (or health) expenditures by government be designed to maximize the increment in aggregate human values?

What are the arguments in favor of educating many a little versus those favoring a prolonged training of a select few?

What are the pros and cons for stressing the education of males rather than females if overall educational resources are very limited?

Who should pay for education if it is not to be universal? Should public funds be used to educate illiterate adults rather than children?

Why should employers subsidize on the job training?

What sorts of skills do underdeveloped countries need most that can be supplied through public education.

Does it follow that government should operate schools if it finances them?

In what way are the economic effects of education and health expenditures the same?

How does lengthening life expectancy encourage prolonged training? What are the arguments of stressing health programs against debilitating rather than fatal diseases?

What are the most serious debilitating diseases and how are they controlled?

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To what extent is India's output increasing more rapidly than its population?

What are the principal reasons for the high crude rate of population

increase?

How is it that India's GNP is more sensitive to each year's monsoon than is the income of most countries to weather fluctuations?

What is the future annual increase in the urban labor force to be and how dependent is this increment on internal migration?

Why is there a conflict between investing in projects that maximize jobs and those that maximize output value?

What, if anything specific, is India's Third Five Year plan apparentl

trying to maximize?

What are some of the theoretical difficulties inherent in estimating and applying coefficients that purport to indicate the capital required to create a job in different industries?

Are there any obvious reasons for the failure of Indian exports to

expand significantly to date?

What alternative price policies face the new Indian government steel

How are the plans of the States and Central Government meshed in theory and - if probably different - in practice?

In what way is the private sector of the Third Five Year plan really

What are some of the most important controls the Central Government has over the private sector?

What cultural characteristics of India inhibit economic development? To what extent does the Third Plan exceed probably available resources?

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\* Asterisk means required

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(3 Hours - No Choice - Equal Weight)

I

"The essence of development in a 'dualistic' backward economy is to put the rural unemployed to work. In agriculture they have a zero marginal productivity. Hence there is no real cost to their employment in industry. Incremental capital to output ratios of 2.0 are not uncommon in industry. Thus, is a country with a per capita income of about \$100 a year, loans over a number of years totalling \$200 per head would double national output." Evaluate

#### II

Are there any senses in which a developing country needs "balanced" growth? Is it necessary that many different consumer goods industries be established simultaneously so that their expenditures will create effective demand for their own products? Why is it in practice that development seems to constitute a series of imbalances? (Include Hirschman's and Sheahan's views.)

#### III

"Investment criteria for the public sector cannot use estimates of the rate of return on capital. There are external economies to be considered. The effect on foreign exchange availability is important too. Socialists cannot use capitalists' methods for assessing investments. We use scientific investment criteria, such as those of Buchanan and Chenery." Evaluate

#### IV

What are some of the characteristics of a good tax system for a backward country? Which taxes would you favor and which would you not favor? What are the major respects in which tax systems in backward countries should be different from those in advanced nations?

#### V

How can a nation invest in human capital? What are the pros and cons of investing in education rather than public medical facilities? Under what conditions are investments in medicine - including male sterilization - likely to contribute more to per capita income than investments in physical industrial capital? (Include ideas of Winslow and Schultz)

#### VI

Describe and evaluate Arthur Lewis' theory of development with "unlimited" supplies of labor.