

Financial Options for Economic Development*

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THE PURE THEORY OF DEVELOPMENT

As a model builder, I feel comfortable in analyzing economic development through the construction and use of 2-gap mathematical-statistical models. This serves as a paradigm for the modelling of developing countries.¹ All systems have a core, and although analysis of developing economies must take many interrelated processes into account simultaneously, the more complex systems can usually be reduced to a simplified core of broad macroeconomic relationships. The 2-gap model is, of course, only a starting point because the analysis must deal with such sectors as demographics, family budgets, and the formation of market prices – possibly only relative or real prices. Such a system looks at the economic development issues in physical terms, with some real (relative) prices for allocation theory. A great deal of interesting material can be prepared along these lines for guidance in the development process.

The building blocks are:

- (i) Production functions for introducing technological constraints, perhaps extended to include an input-output component;
- (ii) Conditions of marginal productivity, i.e., optimality in reaching production decisions both for output and input;
- (iii) Population dynamics and more general demographic processes extending to labour supply, immigration, emigration, and distribution of income/wealth;
- (iv) The conditions for consumer choice, generating ultimately large-scale demand systems, starting with family budget analysis. As in the case of production analysis, optimality decisions guide model specification; and
- (v) Trade systems showing how exportable surpluses are created and offset,

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¹L. R. Klein and Youcai Liang, "The Two-Gap Paradigm in the Chinese Case: A Pedagogical Exercise". *China Economic Review* (Spring 1989) 1–8.

to a large extent, by imports of relatively deficient goods. The laws of comparative advantage underlie this phase of the analysis and demand very careful study in order to learn how to help with system building.

This listing of the building blocks shows the many dimensions of growth. The conditions for strong or weak growth and for optimality can be described, for the most part, within this framework. Except for the relative prices, which are market-based allocators, the magnitudes mentioned above are physical flows or stocks. It is possible to go far with such a framework, but something important is lacking, namely, money, securities, other financial instruments.

In the physical analysis, it is usually (but not always) assumed that full employment prevails and that the system exhibits financial stability. Such assumptions are unnecessarily restrictive, and it is the purpose of this lecture to outline some financial dimensions of growth and to inquire into the outcome of a much more general model in which there is joint determination of real and financial magnitudes.

The world is not always so kind as to provide a "perfect" environment with all the conditions of unfettered competition that are usually assumed to prevail by economists. We are, therefore, led to pose the question, how does the financing of growth enter the analytic system? How does financing affect economic development? What are the ways of financing development?

THE AVENUES OF FINANCE

"Own" Saving. This is the most obvious way to finance development. It would require, however, that workers produce more than enough for subsistence and eventually for moderate living for all. Out of the excess ("more than enough") a pool of resources can be formed, which contributes directly or indirectly to growth and development.

"Own" saving is fundamental and certainly should be available at least as a partial source of development financing. If people produce both subsistence items and cash crops or minerals, the latter two (i.e., the amounts not consumed directly) contribute to gross saving and could be used for funding in constructing homes, business buildings, infrastructure facilities, and business equipment – say through equipment assembly.

"Own" saving sounds very rugged and independent, but few countries can manage to find enough resources for total development needs in this way. It is simply not entirely suitable for many poor countries. It requires both a strong saving *propensity* and enough extra resources that can be saved by the population, after basic needs are taken care of.

"Own" saving is a fruitful area for doing as much as is possible or feasible,

but it is likely to provide too little, by way of resources, and supplements will have to be sought. In most cases of successful development, "own" saving has been important, but there have generally been external sources as well, particularly at the beginning. If we look at the economic success stories of Japan, the Republic of Korea, and Taiwan, we can clearly see the influence of external sources of financial capital. After the devastation of the Second World War, America helped Japan to rebuild, particularly through the supply of resources to Japan as a staging area during the Korean War. After the Korean War, both Japan and the United States contributed to Korea's remarkable development. In the case of Taiwan, both U. S. and Japanese capital were important for development. And in all three cases, American military defense provided a protective cover for the devotion of attention to fruitful economic development.

A first hurdle, then, will be to gain international respect and attention through saving, but by going on to provide more adequate resources by turning attention to the attraction of *equity capital formation*.

Equity capital consists of joint ventures, direct investment by multinational enterprises, issuance of ownership shares on the domestic and international markets by going "public".

Joint ventures can be very attractive. The host country gains through the acquisition of know-how in technology transfer, as well as through the direct receipt of funds from abroad for operational and equipping purposes. Joint ventures can breed friction, but they need not do so since they can be structured so that both parties gain. The host country gains by having more goods supplied to the markets and by learning from the visitor. The visiting team gains by having new markets and an opportunity to realize economies of scale, in case they are present in the companies being formed.

But joint ventures are not always attractive in the eyes of most people. The host country may look with suspicion and distrust towards the visitor. The hosts are particularly concerned about control of decision-making in the sector in which the joint venture is located. If a host country is adamant about limiting the visiting team in the firm of joint ventures to less than 49 percent of stock holdings, they may turn away some good propositions. The same is true about limitations on convertibility and repatriation of net earnings. Some countries who were strongly opposed to the entry of foreign equity capital of any sort, such as were the former attitudes of India and Mexico, have changed their ideas, especially after having had the most unpleasant of experiences with debt capital or with disastrous accidents. They now welcome joint ventures with majority ownership resting in the hands of foreign invaders. The gains often outweigh the drawbacks, and this important source of financial capital must not be ignored. The changed attitudes towards foreign equity ownership in Mexican and Indian enterprise are significant in showing the way to a

new economic order in some countries of Eastern Europe. All problems and negative attitudes have not been overcome, but there is a much better climate for international equity capital now in Eastern Europe than at any time since the end of the War in 1945.

Direct investments often, but not always, involve outright ownership of a facility by multinational enterprise. In a sense, these enterprises place branch establishments in foreign countries without benefit of guidance from the host representatives. There are not enough checks and balances with regard to the operation of a direct investment enterprise by the multinational firm headquartered abroad. Consequently, some serious mishaps occur or the visiting entrepreneur becomes deeply distrusted.

Finally, equity financial capital can be attracted to a host country through passive buying of shares on the part of foreign investors. In recent years the shares have been sold through the medium of mutual funds. Some of the better known of these are Mexican Fund, Korea Fund, Taiwan Fund, Thai Fund, Asia-Pacific Fund and so on. They were all inspired by the early success of the Japan Fund, when Japan was on its way to becoming a major economic power. These funds are all right, but they are limited in scope, and cannot come close to solving the problem of capital availability for the developing economy. What is needed in order to get creative, innovative, and efficient capital formation in developing countries is funding for *venture* capital. To a large extent, the passive investor will look for established opportunities, but the host developing country must try to create a receptive climate for more speculative venture capital, where a few successful cases can be very important for future growth.

As an alternative to a fund, there are special classes of shares, such as American Depositary Rights (ADRs), that are sold abroad in far-flung stock exchange trading. The shares are actually held by banks who then issue ADRs or clones of ADRs to U. S. and other investors through company listings on the major exchanges of the world. An important feature of the ADR is that it has no voting rights for the ultimate investor. This allows passive investors to participate in development and provides capital to the host country without there being a fear of loss of control.

Of course, there can also be share acquisition and ownership by foreigners, without the use of instruments like ADRs. In the case of South Korea, however, since the equity market has not been fully deregulated yet, the only way for foreigners to invest in South Korea's growth has been to purchase shares in Korea Funds or to buy convertible debentures that will eventually be transferable into regular equity holdings. Under these limitations, the Korea Fund regularly sold at a high premium over net-asset-values because it was the major investment vehicle open to foreign purchasers.

The opposite of equity capital for flows into developing countries is *debt capital*. There was a tremendous capital flow from the industrial democracies into developing countries in the form of bank and official loans during the 1970s, but that kind of financial flow carried with itself extremely serious problems for the host countries.

The essential differences between debt and equity capital in the present context is that equity funds are known, and assumed, to be risky. They reward the investor with dividends and capital gains, but these elements of return can be made available only if it is suitable for the paying (host) enterprise. In good years they pay; in bad years they can refuse to pay or scale back payments. This is so because the investor knows that this kind of risk comes with the equity share concept, and the trend rather than the cycle shapes the investment target.

In the case of loan capital, however, payments cannot easily be turned off and on; they are, in principle, fixed charges that are meant to be honoured at all times. The workings of the system have been quite perverse for developing countries during the 1980s, which has been termed a *lost decade* for some of them by many people in the international economic community.

It is worthwhile considering, at this point, the origins and handling of the debt problem for developing countries in order to show how it came about, how it affected the development plans of many countries, and how it is affecting their present prospects for medium term economic improvement.

In many respects, the debt problem, as we know it today, was a by-product of the recycling of the petro-dollar surplus during the 1970s. It has been often claimed that this recycling operation was very successful, but it really did not work out that way. The particular recycling technique actually paved the way for the world debt crisis, which has proved to be an enormous burden for developing countries who have tried to expand. Oddly enough, both oil-importing and oil-exporting developing countries were severely affected, while a number of countries avoided crisis situations whether they were energy exporters or importers. The most prosperous of the oil-exporting countries with relatively small populations naturally avoided debt entanglements; they invested their surplus in domestic infrastructure, some grants to partner countries, and an impressive portfolio of diversified world assets.

In the first instance, however, the major producer-exporters of oil had surplus revenues that remained on deposit in banks throughout the world. Banks were flush with idle reserves which were then placed, through very aggressive marketing of loans, in many developing countries who were seeking inflows of financial capital. There were errors on both sides. Banks were too anxious to put their surplus funds to work, and developing countries were too eager to borrow. It was not only developing countries who fell into this trap. It must be stressed that the first wave of failures occurred in Poland, where authorities were actively seeking capital infusion. In

total, the flow of financial capital in this recycling process was not well utilized. That is not true in every case, but some of the largest recipients did not use the flow to establish capital facilities that would contribute to future well being of citizens. In Latin America, a great deal of the lending went into capital flight, excessive consumer spending, or investment projects that did not work out. But, even if the loan capital that entered developing countries would have been used in an appropriate way there was another complication, namely the rise in world interest rates starting in 1979. This complication arose because the main creditor or lending countries used orthodox monetary policy to deal with their own inflationary tendencies. The high values for U. S. Prime and Labour rates made it extremely burdensome for developing countries in servicing this debt. Things beyond the control of third world borrowers imposed severe economic hardship because the borrowing nations were exposed, with very heavy indebtedness. Had they elected an equity route of financing instead of a debt route, they would not have incurred such an inflexible burden. Interest charges were unavoidable, while equity payments are avoidable, at critical times. It must be emphasized that orthodox monetary policy was not the only option open to industrial countries for curbing their inflation. The loose and often unwise economic policy decisions effectively shifted the burdens of adjustment to the indebted developing countries, and this is the starting point for the "lost decade".

The outcome was a world-wide recession in which the developing countries were hit doubly hard. They could not find attractive markets for exports to industrial countries, and the high cost of debt service forced them to curtail their imports. The industrial countries were able to come out of their recessions in 1982 and 1983 to enjoy a remarkable economic expansion for the rest of the decade, but the enormous gains were not spread round the world. There were exceptions, but for the developing countries as a whole, there was little or no participation in the economic upswing.

Unfortunately, we are seeing some of the perverse developments again. The recession or economic slow down of 1990-91 accompanied by weak commodity markets and excessively high interest rates have all contributed to restraint in the area of third world economic development. The Gulf Crisis adds to the problem for many countries, especially those in the neighbourhood of the Middle East.

SOME FINANCIAL INDICATORS

The poor growth statistics, balance of payments deficits, debt service shares of exports or GDP, hyperinflation are all consequences of the predicament that entrapped many developing countries. There are, however, some other indicators of the problem that are more useful for analytical purposes. First, let us consider the

magnitude of financial capital flows. A developing country generally needs to have funds coming in, on balance. In an active economy in today's global financial market, there will always be funds moving in both directions, but the general problem for developing countries, particularly those at the bottom of the scale of well being, is to have more coming in than going out. In the era of burdensome debt servicing, however, it is certainly possible that more will be going out, in the form of capital servicing for interest and amortization than will be coming in. This is a bad situation for any country that needs productive fixed capital from abroad and also current items to make production possible or life tolerable. The debt problem can be said to be under control when a country can:

Earn enough from exports to pay interest roll over maturing debt; and
Receive enough new funding for growth.

Low or moderate interest charges are essential for these things to happen on a broad scale.

An interesting rule of thumb is that export earnings should grow at a faster annual rate than the rate of interest (denominated in the same units). In fact, the ratio of debt to exports will satisfy the identity

$$\frac{D_t}{X_t} = \frac{1 + i_t}{1 + r_t} \frac{D_{t-1}}{X_{t-1}} - \frac{B_t}{X_t}$$

where B_t/X_t is the ratio of non interest current account balance to exports, i_t is the interest rate on debt and r_t is the growth rate of exports. To make the argument simple, let us measure debt, interest, and exports in U. S. dollars. This means that the debt/export ratio will stabilize in a dynamic sense if $1 + i_t$ is less than $1 + r_t$, assuming that B_t is not steadily (persistently) falling.

This is a familiar stability condition in first order finite difference equations. From this simple relationship, it can be seen how important it is for interest costs to be below export earnings growth for developing countries; otherwise they are likely to experience a rise in their debt/export position and become judged as poor credit risks for further infusions of capital. The relationship among interest, trade, and capital flow becomes clear from these simple truths.

SOME STATISTICS ON DEBT AND FINANCIAL FLOWS

In the *World Economic Survey, 1990*, the United Nations have tabulated interesting figures on debt and related capital items. For capital importing developing countries, they show that total debt approximately doubled between 1980 and

1989. This took place when some economists were claiming that the debt problem was under control – to the point of fading away. The problem remains as a very serious obstacle to development after more than one decade of tinkering with stop-gap measures. There was growth, also, in relation to either exports or GNP of these countries, all together. Very large holdings of debt are in Latin America, but this area holds less than one-half the world total for the group. (See Table 1.)

These figures do not give one a sense of problem resolution or even control, but they do show that the rising values of the ratio of debt to GNP or exports peaked around 1986-87 and have receded since then. But in terms of the total net transfers from developing country debtors to creditors the picture is less encouraging. There is some question about how to measure net transfers, but the UN (DIESA) measure shows net inflows from 1980 to 1982, becoming negative (transfers *out* of LDCs) and generally growing in size from one year to the next. The UN estimates a net inflow of \$ 36.8 billion in 1980 and an outflow of \$ 22.1 billion in 1988.

It is interesting to examine statistical measures for some of the large debtors or for those who have been reducing debt. This tabulation needs some interpretation, case-by-case. Brazil is the largest debtor among developing countries. By some reckoning, its debt exceeds \$ 100 billion, but the World Bank total includes only certain debts and amounts to almost \$ 90 billion. This is the largest outstanding debt figure in their tabulation across developing countries. The two ratios listed, debt to GNP and debt service to exports of goods and services are large but not the largest in the Brazil case by far. These two ratios are now much larger than they were before the problem was created during the recycling of the petrol surplus during the 1970s. Brazil's debt ratios were quite respectable and attractive to lenders in 1970.

Chile presents an interesting situation. Like Brazil, it is an oil-importing country. It has moderate-size debt in 1988, but its service ratio is fairly small, lower than in 1970 and also lower than in 1987, when it was 21.1 percent. This is of interest because Chile has been reducing debt, partly through debt-equity swaps. Its outstanding debt was *reduced* from \$ 15.5 billion to \$ 13.8 billion between 1987 and 1988. The debt/GNP ratio also fell, from 89.4 percent to 67.7 percent, from 1987 to 1988, and the declining tendency continues.

Both Mexico and Venezuela are major world oil-exporting countries, but both have unfavourable debt positions. Mexico's debt is much larger, but its population is nearly 5 times as large as Venezuela's. Their respective service burdens are large and are subject to careful debt management negotiations with creditors. Now, both countries are in favourable positions with respect to oil exports and stand to gain very much. Whether such funds would be used, as in other countries, to reduce debt is questionable. Mexico, for one, is depending on debt relief through the Brady Plan, but improvement through this route is difficult to find. It should also be

Table 1

Debt of Capital Importing Developing Countries

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total Debt (Billions)	\$ 567.1	659.9	741.9	808.1	838.7	917.8	1012.5	1138.4	1103.9	1133.0
Ratio of Debt to GNP (Percent)	27.0	29.6	34.3	39.3	39.8	42.9	45.8	47.0	40.3	40.0
Ratio of Debt to Exports (Percent)	117.8	128.5	152.4	166.9	157.9	176.0	194.9	182.7	155.6	146.5

Source: United Nations (1990) *World Economic Survey*.

remarked that Venezuela is making bigger gains from oil exports now than is Mexico. In the latter case, the inflow of debt capital before 1982 was not properly used to invest in future oil production potential.

The Philippines and the Republic of Korea, share the distinction of being based in the Pacific Basin, where the economic pace is very fast. The Korean debt ratios are, however, much more favourable than those of the Philippines. The latter are not improving at all, and the economy is hurt by a *negative* financial capital transfer. This development and severely perverse natural events (earthquake, drought, typhoon), not to mention political instability, have held back expansion and target fulfilment.

Korea, in contrast, reduced debt practically by one-half, after the realization of trade/payments surpluses. The key debt ratios are falling impressively and this is all being accomplished in spite of the need to import oil in both cases.

India's population is much larger than Pakistan's. Pakistan has much less debt but not in proportion to its lower population. The key debt ratios are, however, larger for Pakistan. The ratios are, by no means, the worst values in the table, but they are large enough to cause development obstacles, especially when hit by reduced remittances from the Persian Gulf area. This, too, is a problem for the Philippines.

Neither India nor Pakistan became outstanding problem cases when the debt issue surfaced in 1982. The Indian figure for total debt was revised upwards when it was discovered that deposits from the far-flung diaspora were formerly not counted as liabilities abroad.

As the figures in Table 2 show, the debt ratios are least unfavourable for low-income countries, as a whole, and they probably receive concessionary lending, which helps to keep interest burdens down a bit. This is particularly true for Sub-Saharan economies, especially with regard to debt service. The individual country debts in Africa are not so large, but ability to pay on debts is very limited, as real GNP per capita is presently falling in Sub-Saharan Africa.

SOME CONSEQUENCES

When the debt problem first became evident as an obstacle for economic development, it was thought that the issue would not remain serious for such a long time – now more than 8 years running. At times it looked tantalizingly as though developing countries might be able to “grow out” of the entire problem. That did not happen. Key ratios became more unfavourable, and the “lost decade” did take place. The matter remains far from being resolved.

In Latin America, where the problem is possibly the most severe, the Latin American Parliament made the following declaration on March 20, 1990: “Proponer

Table 2

Selected Debt Statistics, 1970 and 1988

	Debt/GNP (Percent)		Debt Outstanding (\$ Billion 1988)	Debt Service/Exports (Percent) (Gds+Serv)	
	1970	1988		1970	1988
Brazil	8.2	26.3	89.8	12.5	35.9
Chile	25.8	67.7	13.8	19.2	14.9
Mexico	8.7	48.0	81.2	23.6	30.3
Venezuela	5.6	41.1	25.4	2.9	25.5
Philippines	8.8	60.1	23.5	7.5	25.6
Republic of Korea	20.3	12.6	21.3	19.5	9.1
India	13.7	18.7	49.7	22.2	21.8
Pakistan	30.6	37.4	13.9	23.8	23.5
Low Income Economies	—	27.6	248.5	—	17.0
Middle Income Economies	11.5	40.8	663.0	11.1	21.6
Upper Middle Income Economies	10.3	33.6	190.3	8.9	19.7
Sub-Saharan Africa	12.5	78.2	112.4	5.3	16.5

Source: World Bank (1990) *World Development Report*.

la ejecucion de politicas nacionales que, planteen ante la Organizacion de Naciones Unidas la creacion de un Tribunal internacional que estudie el problema de la deuda externa de los paises latinoamericanos.” This proposal to have the United Nations create an international tribunal to study the external debt problem of the Latin American countries is a sensible suggestion. I would simply go one step further and recommend that a *world* debt conference be called – not just for Latin American countries – and that this conference devise programmes analogous to those used to bring corporations out of bankruptcy status (Chapter 11 proceedings for business as in the U. S. or, possibly, Chapter 9, which is applicable to local governments).

It is one thing to find a solution for the debt problem, but it is another to devise ways of inducing growth in the developing world without excessive reliance on renewed debt financing.

In this respect, I strongly recommend that nations look more favourably on the various forms of equity financing that were discussed earlier. But financing procedures, alone, cannot insure that recovery through expansion and growth take place on a scale that promises to bring better living conditions to the great majority of people on this earth. In the end, there is no substitute for hard work, acceptance of high standards for the *work ethic*, productivity gains, lower capital costs (mainly interest rates), and patience. For the most part, good growth does not come easily or quickly. It must be achieved through persistent hard work. That is what has propelled the countries of Asia and the Pacific Basin along such impressive growth paths.

Comments on “Financial Options for Economic Development”

Writing in 1924 on loans to Governments and local authorities abroad, Keynes observed,

These loans have a fairly ancient history but on a great scale they ... are quite modern. To lend vast sums abroad for long periods of time without any possibility of legal address, if things go wrong, is a crazy construction; especially in return for a trifling extra interest. The investor has no remedy – none whatever – against default. There is on the part of most foreign countries, a strong tendency to default on the occasions of wars and revolutions and whenever the expectation of further loans no longer exceeds in amount the interest payable on the old ones. Defaults, in fact, are world-wide and frequent. ... Mexico, all Central America, most of South America ... have all defaulted in whole or in part at one time or another.²

In his Quaid-i-Azam Lecture, Professor Klein returns to this topic from the point of view of the LDCs and recommends that they attract foreign investment in the form of equity rather than debt capital, such capital “consisting of joint ventures, direct investment by multinational enterprises [and] issuance of ownership shares on the domestic and international markets by going public”. In this, Klein bypasses the still-burgeoning literature which views the loan market as a repeated game and uses the insights of game theory to design “cheat-proof” and “renegotiation-proof” contracts.³ Instead, Klein makes the simple point that in a world of uncertainty, equity shifts some of the risks to foreign investors and thereby provides a more efficient arrangement for risk sharing. Klein underscores this basic point:

¹The final version of this comment has benefited from the response of Professor Klein and from the observations of Professors Vandana Chandra and Ron Jones. Errors are, of course, solely the author's.

²See Keynes (1924).

³See, for example, Kletzer and Wright (1990) and the references therein.

- (i) By providing some statistics on debt and financial flows for several countries;
- (ii) By proposing a world debt conference that is oriented, in part, towards international versions of Chapters 9 and 11 of The Bankruptcy Statute, and one that builds on the extensive legal literature concerning programmes and rules designed to bring corporations and local and municipal governments out of bankruptcy status;
- (iii) By exhorting LDCs "to gain international respect and attention through saving"; and
- (iv) By warning that "there is no substitute for hard work, acceptance of high standards for the work ethic and patience".

There are four implications of Professor Klein's paper which I would like to mention but only one of which I shall have the time to draw out in any depth.

The first is the obvious parallel with the institution of *sharecropping*. Joseph Stiglitz has long maintained that "understanding sharecropping may provide insights into understanding modern capital markets"⁴ and Klein's recommendation can also be seen as an attempt to apply the insights of this literature to issues of international investment. It is clear that in the original agricultural context, the pure rental contract shifts all the burden of risk to labour working the land, while the pure wage contract is a corresponding shift of risk to the landlord. The former institutional arrangement avoids any need for the monitoring of labour by the owners of land but requires labour to bear all of the costs of imperfect information as to the quality of the land; in the latter arrangement, the landlords' costs of monitoring labour are maximized and they bear the full consequences of imperfect information as to the quality of their labour force, uncertainties as to the quality of land being rendered inconsequential for labour. In the context at hand, the rental contract translates into debt capital whereas the wage contract leads to a multinational in whose ownership the host country has no claim. Thus, what revolves on attitudes towards risk and the costs of monitoring both technological inputs and outputs, very quickly merges into problems of ownership with its attendant mare's nest of sovereignty issues.

The second implication of Klein's paper relates to the validity of the Modigliani-Miller theorem for the global economy as a whole. The Modigliani-Miller theorem asserts that the value of the firm is independent of its debt-equity ratio, or to put the matter in a slightly different way, the shareholders are indifferent as to the dividend policy of the firm. If Klein's recommendation has to have any bite, it must involve a denial of the Modigliani-Miller theorem for the world economy. That this must be so seems eminently reasonable. The theorem, even in a

⁴[See Stiglitz (1974) and (1988).]

single country context, is already conditioned on a variety of assumptions whose validity has been open to question and argument.⁵ Once the asymmetry between international and domestic markets, as well as the asymmetry between foreign and domestic ownership, is explicitly introduced, the issue clearly has to be posed and studied anew. And of course, such asymmetries offer the basic rationale for studying international economics.

A third implication relates to history of economic thought in general and Islamic studies in particular. The issue can be best introduced by a quotation from a recent volume:

Islam proposes that the banking systems that operate on the basis of an *ex ante* fixed rate of interest be replaced by a profit-sharing system in which the rate of return is not known and is not fixed prior to the undertaking of the transaction. From this distinction between the certain rate of interest and an uncertain rate of return it follows that, if a banking structure could be evolved in which the return for the use of financial resources would fluctuate according to actual profits made from such use, the resulting system would be in conformity with Islamic rules and guidelines.⁶

Leaving aside the question of what exactly is meant by the phrase "Islam proposes", and what meaning one can give to the term *riba*, the fact remains that "interest-free banking" in the sense given it by the quotation, has been adopted in both Iran and Pakistan.⁷ Thus Klein's recommendation naturally dovetails into two separate lines of inquiry: the first having to do with the design and study of a particular economic system subscribing to such a rule; and the second having to do with the issue of studying Islamic doctrine in an international set-up. Such work in the history of economic thought would complement and extend the work of Udovitch and that of the Institute's own Dr Ziaul Haque.⁸

Finally, I consider some implications of Professor Klein's recommendation for an extension of the theory of international investment. The vocabulary of this literature has already been extensively used in this conference as in *labour-intensive*, *comparative advantage*, *immiserizing growth*, and so on, and as such, I simply continue the conversation.

I begin with a proposition of my mine that is set in the context of the Generalized Harris-Todaro model in which capital is intersectorally mobile.⁹ Such a

⁵See Brickley and McConnell (1988) and their references.

⁶See the Introduction in Khan and Mirakhor (1987).

⁷See Khan's 1987 IMF Staff Paper reprinted in Khan-Mirakhor.

⁸[See Haque (1977) and Udovitch (1970).]

⁹For the Harris-Todaro model, see, for example, my *Palgrave* entry and the references therein.

model incorporates urban unemployment in equilibrium and is a generalization of the more classical Heckscher-Ohlin-Samuelson model¹⁰ of trade theory.

Proposition 1: *Capital inflow in the presence of a tariff and with full repatriation of its earnings is immiserizing if and only if the imported commodity is capital intensive in employment adjusted terms and irrespective of the different mechanisms for determining urban wages.*¹¹

If the urban wages are determined competitively, as in the Heckscher-Ohlin-Samuelson model, the proposition contains the principal result of Uzawa, Hamada, Brecher and the late Carlos Diaz Alejandro that has come to be known in the literature as the Brecher-Alejandro paradox.¹² To keep the discussion on track, we may now ask for the generalization of Proposition 1 to a setting with uncertainty and in which foreign investment can take the form of debt or equity capital? However, in the light of recent work of Grinols questioning the universality of the so-called Brecher-Alejandro proposition, there are two additional results that we may usefully keep at the back of our minds.

Proposition 2: *In the rigid wage version of the Generalized Harris-Todaro model, dynamic stability in factor markets implies that capital inflow with full repatriation of earnings and in the presence of a tariff, is always immiserizing.*

Proposition 3: *In the Ricardo-Viner model, if there are no initial holdings of foreign capital in the export sector, say the rural sector, a tariff-induced inflow of such capital with full repatriation of earnings is never immiserizing. On the other hand, if there are no initial holdings of foreign capital in the import sector, say the urban sector, a tariff-induced inflow of such capital with full repatriation of earnings is always immiserizing.*

Proposition 3 extends to the Generalized Harris-Todaro model with intersectorally non-shiftable capital¹³ under an additional hypothesis for which the reader is referred to Khan (1982).¹⁴ These details are, of course, not the primary issue. What

¹⁰For this, as well as the Ricardo-Viner model, see, for example, Caves *et al.* (1990)

¹¹See Proposition 2 in Khan (1982) for explication and proof.

¹²[See Uzawa (1969) and Hamada (1977).] Since Hamada's work has been ignored in this context, certainly by myself, the following quotation from page 231 of his paper deserves to be reproduced: "... if the economy is protecting by way of a tariff the relatively capital-intensive industry, ... then the introduction of foreign capital will deteriorate the national income in terms of international price ratio as long as foreign capital receives its marginal product. This was shown by Uzawa (1969)".

¹³An alternative interpretation is, of course, that of three factors of production.

¹⁴I may mention in passing that it is precisely the force of these additional hypotheses that makes me sympathetic to the force of Grinols's (1960) recent remarks.

is of importance is that Professor Klein's paper suggests many interesting directions for theoretical work. I will mention four:

1. How do these propositions fare when they are extended to a world with uncertainty and in which foreign investment is disaggregated into debt and equity capital? One would have to evaluate welfare in the expected value of GNP and it is reasonable to conjecture, given the previous performance of the Generalized Harris-Todaro model, that the propositions stated above will remain valid in a modified way;
2. Even without uncertainty, I do not know of any work which examines the effects of foreign investment in a context that allows for urban unemployment and additional policies such as a profits tax, or import quotas and with or without constant returns to scale;¹⁵
3. The other extension that I have in mind relates to the disaggregation of the economy on provincial lines as is done in my previous work.¹⁶ One can now ask whether the issue of debt versus equity capital exacerbates or attenuates provincial disparities. This is a question which is of some importance given Pakistan's past – it may also have a more topical interest; and
4. Finally, one may go in the other direction and consider a two-country global economy model of the North-South variety with uncertainty and asymmetry of production structures as considered by Kemp-Ohyama (1978) and their followers.¹⁷

Finally, I end my comments with a methodological observation prompted by Professor Papanek's *obiter dictum* that we "avoid working on 'naughty theoretical problems' that constitute no difficulty in practice". The trouble with this recommendation is, of course, the particular conception of *practice* or *reality* that a particular policy practitioner has in mind. In the words of Clifford Geertz,

Whatever the really real may be really like, men may do with images of it they take, if they are faithful, as both depictions of it and guides for relating themselves to it.¹⁸

N. Goodman puts the matter another way.

¹⁵Dei (1985) has considered import quotas and Yabuuchi (1982) and (1990) incorporates profits taxes, but neither considers a set-up with urban unemployment.

¹⁶[See Khan and Chaudhuri (1985) and Khan (1989).]

¹⁷See, for example, Findlay (1979), Jones and Dei (1983) and Khan (1984).

¹⁸[Geertz (1968), p. 56.]

But, of course, truth is no more a necessary than a sufficient consideration for choice of statement. Not only may the choice often be of a statement that is more nearly right in other respects over one that is more nearly the true, but where truth is too finicky, too uneven, and does not fit comfortably with other principles, we may choose the nearest amenable and illuminating lie. Most scientific laws are of this sort: not assiduous reports of detailed data but sweeping Procrustean simplifications.¹⁹

Thus, once we grant that the model and its attendant language and vocabulary are constitutive of "reality",²⁰ the distinction of what is "naughty" in theory and not so in "practice", or to put the matter in a more relevant way, whether foreign investment is obviously beneficial for a particular LDC or not so beneficial, seems to me to be topic of investigation rather than one of assertion.

In summary, Professor Klein has given us a broad-based lecture which has obvious policy relevance but also has important implications for work in theory, economic thought and economic systems.

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¹⁹[Goodman (1978), p. 121.]

²⁰See the illuminating review of Penrose (1991) in which he discusses the "enigma" of quantum mechanics in precisely this connection.

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Comments on “Financial Options for Economic Development”

It is a pleasure to be here and an honour to comment on Professor Klein's paper. I was an undergraduate at the University of Pennsylvania where Lawrence Klein is a Professor. I was a staff member of the Oxford Institute of Economics and Statistics. Professor Klein was also a member of staff; we actually collaborated with the same Oxford scholar. Nevertheless, it was not until a few days ago, at this cross-roads of the economics profession, that I had the privilege of meeting Professor Klein for the first time.

I agree with much of Professor Klein's assessment of the causes and consequence of the debt problem and with his three principal conclusions: (1) the desirability of increasing the share of equity capital relative to debt in international capital flows to developing countries; (2) the need to find an international mechanism to reduce the debt burden of countries whose macroeconomic performance has been severely constrained by debt service; (3) the need to ensure that capital inflows finance investment and not consumption (private or public), high return projects rather than “white elephants” with low or negative returns and, I would add, investments in exportables that have the potential to yield the foreign exchange necessary to pay interest, principal and dividends to the providers of capital. My comments will, therefore, be more in the nature of providing an alternative perspective on some issues and an expansion of others. There are a couple of points of disagreement as well.

Why should we expect developing countries to be net importers of financial capital, in other words, to be running substantial capital account surpluses? In theory, the answer is obvious. Given constraints on the international mobility of labour, and leaving aside complications introduced by technical progress and the skill intensity of labour demand, the rate of return on capital should be higher in low-income countries where capital is scarce (hence expensive) and labour is abundant (hence cheap) than in high-income countries where labour is scarce and capital is abundant. Capital should, therefore, flow to low-income countries, with the implication that they will then run capital account surpluses and trade account deficits, from high-income countries which will run capital account deficits and trade surpluses. Furthermore, we would expect to see the capital account surpluses financing the

import from high-income countries of physical capital to be used in the expansion of the productive capacity of low-income economies. These comments simply reinforce Professor Klein's point that domestic savings are unlikely to prove sufficient to rapidly transform a low into a high-income country.

Professor Klein specifies the advantages and disadvantages to developing countries of different forms of foreign capital, namely direct foreign investment, equity capital and debt. I want to stress a point that he alludes to (when he refers to the importance of exports growing faster than the rate of interest and to the high interest rates that have resulted from macro-mismanagement in high-income countries) but does not make explicit. Today, such an assessment of alternative sources of capital is made against a background of an aggregate supply of capital that is not as abundant as it has been. Indeed, for a number of reasons it appears to be sub-optimal.

Why is the supply of capital for developing countries more constrained? Three reasons come to mind: first, the now chronic problem of macroeconomic imbalance in the U. S. combined with reductions in the trade surpluses of such countries as Japan. Throughout the 1980s and into the '90s the U. S. has been consuming more than it has been producing implying trade deficits and capital account surpluses. Rather than providing capital to low-income countries to help finance their development, the U. S. has been competing with LDCs in capital markets for a share of the world's supply of savings.

The U. S. trade deficit has been narrowing in response to the post 1985 decline of the dollar which has stimulated an export boom and markedly slowed import growth. The Persian Gulf conflict has contributed to the decline in the U. S. current account deficit in the short run, though in the longer run its effect may be adverse. The rise in the price of oil and increased economic uncertainty following the Iraqi invasion of Kuwait reduced consumer demand in the U. S. and helped push the U.S. economy into recession, lowering the demand for imports; coalition partners, who agreed to share the economic burden of the war, have been making substantial financial transfers to the U. S.

Continued progress toward transforming the U. S. into a trade surplus nation, however, depends on further reductions in the chronic U. S. government budget deficit. By reducing the pace and magnitude of the planned decline in defense expenditures the Gulf conflict may delay progress on the budget. The implication is that the U. S. will continue for much of this decade to require large imports of foreign capital. Moreover, reductions in Japan's trade surplus, which so many are keen to see, imply reductions in the availability to the rest of the world of Japanese capital.

Second, the transformation of Eastern Europe will require substantial foreign capital. Germany and other European countries running trade surpluses are, in

particular, likely to experience a change in the direction of the flow of their surplus savings. In other words, Eastern Europe, like the U. S., will be competing with developing countries for foreign capital.

Third, there is the problem of debt overhang in developing countries. The high level of indebtedness of many developing countries reduces the willingness of foreigners to provide capital both because of a greater risk of default and because the macroeconomic adjustment process has tended to contract aggregate demand which, at least temporarily, reduces the rate of return on capital.

The picture regarding the supply of foreign capital is not entirely gloomy, however: Taiwan, Korea and other N. I. Cs., are becoming major capital exporters, savings rates are rising in the U. S., which is making some progress in setting its budgetary house in order, and if successful, development in Eastern Europe will contribute to world economic growth and savings.

With regard to the origins of the debt problem, I have a quibble with Professor Klein's interpretation. He asserts that the petro-dollar recycling process following the oil shocks of the '70s went awry. I quote "Banks were too anxious to put their surplus funds to work, and developing countries were too eager to borrow". The implication is that less recycling would have yielded a preferable outcome. With regard to those oil-exporting countries who borrowed heavily, disregarding limited absorptive capacity and the risk of a decline in the price of oil, I agree entirely. With regard to the low-income oil importers, I have my doubts. The rise in oil prices constituted a major unanticipated external shock which rapidly increased their expenditures on imports. To adjust in the short run would have required an export surge, which was unfeasible, or a substantial import squeeze which could only have been accomplished by a steep recession. The initial borrowing made sense. The failure by many countries to set in motion the structural adjustments necessary to reduce external disequilibrium, which resulted in still more borrowing, did not. Both lenders and borrowers bear responsibility for borrowing as a substitute for adjustment.

Professor Klein notes that in some cases borrowed funds either financed consumption or were invested in projects which yielded low or negative returns. This point should be stressed. In many cases it was not the sheer magnitude of the borrowing that resulted in a debt servicing problem but the poor allocation of the investible resources.

Jeffrey Sachs's comparison of Brazil and Korea is instructive.¹ Both were rapidly growing countries in the 1970s. Both borrowed heavily: in 1981 Korea's debt/GDP ratio was 27.6 percent while Brazil's was 26.1 percent. In the 1980s

¹In *Papers on Economic Activity*, No. 2, Brookings Institution, 1985.

Brazil had a debt servicing crisis and a resultant severe recession, while Korea continued to service its debt and experienced only a slight reduction in the rate of growth of GDP. Why? It was not that the world economy suddenly became much more inhospitable to Brazil than to Korea. Both countries experienced substantial negative external economic shocks in the early 1980s. Rather the explanation lies in the uses to which foreign capital was put. Korea used its borrowed funds to invest in export-oriented industries; because of distorted incentives, in particular a grossly over-valued exchange rate, much of Brazil's foreign capital inflow was used for investment in non-tradables, investment in ill-conceived projects or consumption. While for Korea exports as a proportion of GDP rose from 9 percent to 37 percent between 1965 and 1983, for Brazil that proportion remained constant at 8 percent. If a country augments its own savings with foreign capital it must look forward to the day when the providers of that capital repatriate their returns.

Reducing the debt burden of low income countries with debt service problems, by lowering the risk of default and increasing economic activity, hence the rate of return on capital, would increase the supply of foreign capital. I endorse Professor Klein's call for more vigorous debt reduction efforts. I would add that now is a particularly propitious time for two reasons. First, as Professor Klein notes, many developing countries are, perversely, currently experiencing a net capital outflow. Their incentive to default has increased. Default means risking no new capital inflows but it also means no payments on existing debt. For those countries with net capital outflows, default would thus mean a short-run macro stimulus.

Second, the risk to the international financial system of debt write-offs is not nearly as great as it was a decade ago. Banks have aggressively increased loan loss reserves and reduced LDC debt as a share of their portfolios by lending less and by selling off debt in the secondary market. Under these circumstances negotiated debt reduction would appear to be an appealing option to both borrowers (who would see it as less risky than default) and to lenders (who would see it as preferable to getting nothing back on their loans). It is important to stress, as Professor Klein does, that debt relief is not a panacea. If capital inflows increase as a consequence and are then, once again, misused the prospects for economic development will not be enhanced.

Finally, I agree with his view that equity capital is likely to play a more important role than debt in the years ahead. He correctly emphasizes that equity capital is a more flexible form of financing, one that is less likely to exacerbate the inevitable downturns of the business cycle. I would add that the supply of equity capital is likely to be growing relative to debt. Banks tend to be Bayesian. Having been seriously burned in developing countries in the recent past they are unlikely to be very forthcoming with loans for some time to come, even if economic policies and performance in borrowing nations improved markedly.

I close by stressing that Professor Klein is right when he says that, even with a solution to the debt problem, there is no substitute for the wise investment choices and the hard work that yield steady increments to productivity, to output and incomes and to *exports*.

Thank you.

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