Asian Values and Western Finance: International Capital Flows and Malaysia's Future Development

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Abstract: Malaysia's foreign exchange reserves currently represent approximately 150 per cent of her total external debts. These substantial foreign currency holdings reflect a pattern in the region that has been interpreted as an attempt by countries to insure against a recurrence of the external financial crises of the late 1990s. The amounts involved are excessive for this purpose, however, and it is argued below that they are more indicative of a fundamental difficulty confronting the country's development aspirations. With reference to the exceptional period leading up to the crisis of 1997-98, it appears that the foreign currency accumulations reflect a growing inability to find productive domestic use for Malaysia's growing pool of savings. While it is certainly possible to save 'too much' the approach adopted here emphasises that the country should re-orientate her external investments (including some of the reserve holdings) with a view to enhancing the potential return on subsequent domestic capital formation.

1. Introduction

According to recent IMF forecasts, Malaysia's foreign exchange reserves will have accumulated to around 6.5 months' of goods and non-factor service imports during 2005. At approximately USD73 billion they will be the equivalent of over 475 per cent of the country's short-term external debt and, even, 150 per cent of Malaysia's total (short and long-term) external debt (IMF 2005). The purpose of this paper is to examine the circumstances underlying Malaysia's accumulation of international liquidity and to enquire into its relevance for the country's future economic development.

On one level, there is little to explain in that the reserve figures just quoted for Malaysia are symptomatic of a wider development that has been taking place since the financial crisis that engulfed the South-East and East Asian region following the collapse of the Thai currency in July 1997. External capital flow reversals produced serious short-run economic costs in the countries afflicted, and the recent accumulation of foreign reserves can be seen as an insurance policy against the sudden loss of international liquidity that arose in the late 1990s.

From another perspective, however, the phenomenon of such substantial foreign exchange accumulation by the Asian countries is puzzling. Since most, with the notable current exception of Malaysia, have moved to heavily managed floating exchange rate regimes, and since all (including Malaysia) are monitoring short term flows with much more care than before 1997, their vulnerability to sudden reversals is now much reduced. Seen as insurance, therefore, these countries seem to be following the phenomenon often observed in insurance markets: people tend substantially to increase their cover after the occurrence of the insured event even though the objective probabilities of a repeat of the event may

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not have increased.

From the viewpoint of international economic theory, a more fundamental question arises in relation to this reserve accumulation. The basic theoretical proposition is that capital should flow from countries that are rich (and therefore relatively well endowed with capital) to countries where capital is less plentiful. While Asia contains the world's most rapidly growing economies, it is paradoxical from this theoretical perspective that they should currently be pouring loans into the United States where capital remains, for the present, relatively abundant.

It will be argued here that the basic answer to this puzzle is that the rate of return on domestic investment in Malaysia has been declining, and that the excess accumulation of foreign assets is an outcome of that tendency.

The recently proposed international portfolio diversification of the Employees' Provident Fund appears, at least, to be consistent with this interpretation. The EPF covers 10.8 million workers who make compulsory payments of 11 per cent of salary, with approximately matching employer contributions, so that the pension provision for much of Malaysia's population is involved in its portfolio allocation decisions. It is seeking to invest up to USD1.5 billion abroad with a view to acquiring up to USD1 billion of equities and bonds in Asia-Pacific markets in an attempt to improve returns after a disappointing year for all components of its Malaysia portfolio (Bloomberg, 6 May, 2005). An official decision on 23 March raised the limit on foreign investment by local fund managers from 10 per cent to 30 per cent of their portfolios suggesting that this may be a systematic phenomenon.

If the hypothesis of poor domestic returns has validity beyond a single unsatisfactory year or so, it would have serious implications for a country at Malaysia's stage of development. As an 'emerging' economy, the objective made clear in 'Vision 2020' when it was launched (in 1990) was for Malaysia to make the transition to full developed economy status by 2020. This goal was to be achieved by sustaining a GDP growth rate of seven per cent per annum over that 30-year period. Were that rate to be sustained, an almost eight-fold increase in per capita GDP would be implied taking Malaysia to the average income level of today's OECD countries. While something like this trajectory should be possible given Malaysia's record of growth, its achievement will depend on a high rate of highly productive investment expenditure.

What, then, is the relationship between this national development requirement and the current accumulation of substantial (and low-yielding) external financial assets?

2. From Capital Stock to Savings Flow

For a country to be able to accumulate net foreign exchange assets (including reserves) on a sustained basis, a necessary condition is that export revenues should exceed imports of goods and services – that the current account of the balance of payments should be positive. Malaysia has certainly met this condition in recent years. Citing the IMF (2005) figures once again, Malaysia's current account surplus in 2005 is expected to represent over 13 per cent of GDP. This balance, of course, includes interest paid on existing debt. Another measure, therefore, is that Malaysia's visible trade surplus will represent nearly 24 per cent of GDP in 2005 (IMF 2005). These are colossal real resource transfers to the rest of the world and they deal a serious blow to the idea that capital should flow from the most capital

abundant to the less capital abundant countries. Is there any rational explanation for the current Malaysian (and Asian) pattern?

The immediate explanation is that the flow pattern we are observing is related to the relative flow of national saving, rather than to the relative stocks of national capital. While net national saving in the United States is currently in low single digits, a concrete manifestation of Asian values lies in the extraordinary national saving rates observed in this region. Figure 1 below reports the values of household consumption and GDP in Malaysia over the years 1960-2001 (in constant 1995 USD). A logarithmic scale has been used with the result that the slope of the fitted trend lines represents the annual growth rate of the two variables.
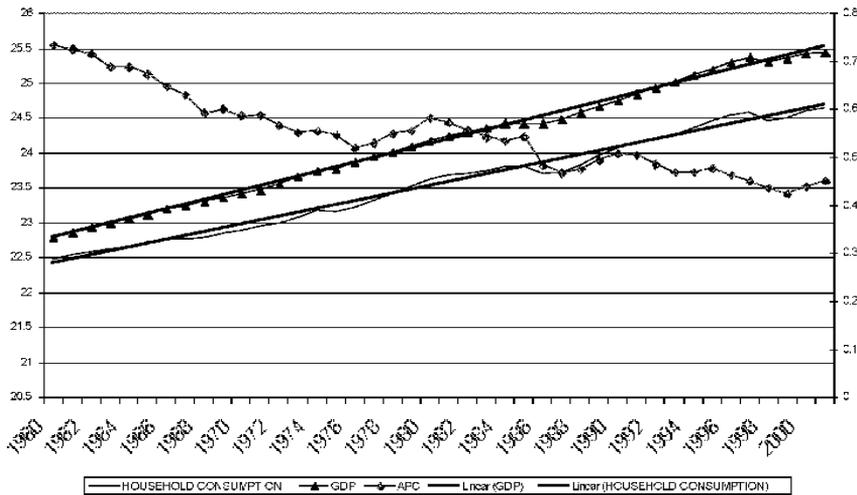

Figure 1: *Malaysia consumption and GDP trends 1960-2001 (logarithms)*

The trend lines seem to reflect underlying developments over this relatively long time period and suggest that the sustained rate of growth of real GDP (around 6.7 per cent per annum) has exceeded that of private consumption (5.5 per cent p.a.). This small discrepancy has resulted in a declining ratio of private consumption to GDP. Known as the APC (measured on the right scale) the ratio has fallen from about 70 per cent in 1960 to about 45 per cent in 2001. For future reference, it is worth noting from the consumption series that two sub-periods of 'above normal' consumption are apparent – from about 1978 to 1986 and from the early 1990s to the onset of the crisis in 1997-98. The first of these is sometimes attributed to the international terms of trade gains enjoyed by Malaysia at that time. The second coincides with the external financial inflows that preceded the crisis. While more will be said about that sub-period, the clear implication of the long run picture is that saving rates have been rising. Total domestic saving (private and public = GDCF + the surplus on goods and non-factor services) measured as a fraction of GDP has grown over these years at an underlying rate of about 2.2 per cent per year. Domestic saving has, accordingly, risen from around 20 per cent of GDP in the 1960s to around 40 per cent of GDP by 2001.

The recent figure approaches a value approximately twice as high as that in a mature

economy such as the UK and it is now clear why Malaysia has been generating the foreign exchange reserves with which we started. Leaving aside the fundamental determinants of the saving rate, we can at least be certain that a high-saving country will be characterised by some combination of two outcomes. The first, as Malaysia's recent record amply demonstrates, would be the net acquisition of foreign assets (including reserves). The second, and it is important to note competing, possibility is that the saving would be used to finance a high rate of domestic investment spending.

We turn now to Malaysia's investment performance, recognising that the decision to invest at home is an alternative to investing financial resources abroad. In an attempt to gain some insight into this trade-off and its implications for the country's future development we start by considering Malaysia's record on investment through the 1990s when she found herself importing significant quantities of foreign capital, despite her remarkably strong domestic saving performance.

3. Abundance, Glut and Crisis

An important query arising from the 1990s concerns the mechanism by which a temporary reversal occurred of the 'natural' tendency for Malaysia's domestic saving to be channelled in part into the net acquisition of foreign assets. What was the influence of these net capital inflows on domestic investment spending and how was it exerted? One interpretation of this reversal is given in Figure 2. It adopts the perspective of a national consumption-investment decision being taken in the present period (shown on the horizontal axis) in the knowledge that this decision will affect the consumption possibilities in the future (shown as a single period on the vertical axis).

Crudely characterising the period before external financial liberalisation as involving no international financial flows, the country's present resources (labour, capital and land) would permit a maximum present consumption level of C_{MAX}. By choosing to reduce present consumption below this level, some resources can be released for investment and this investment will yield future consumption possibilities. It is normal to assume that the process will encounter diminishing returns as the best projects are undertaken first, and this is reflected in the shape of the frontier as drawn. It is worth stressing for future reference that the deteriorating trade-off can also be thought of as involving decreasing effectiveness in the installation of capital equipment. The more we emphasise investment, the more we encounter 'absorptive capacity constraints' in the form of managerial and educational support for the capital being installed.

Accepting the implied trade-off, in the initial (financially closed) context, the preferences of the representative resident of the country are shown by the vertical and horizontal lines indicating the inter-temporal consumption combination $C1_0$ and $C2_0$ in the first and second periods respectively. Note that with present consumption at $C1_0$, the current investment of resources (I_0) will permit the future consumption level of $C2_0$. This choice of consumption combination is meant to capture the evident preference of Malaysians for future consumption. Note that the dashed tangent is at 45 degrees suggesting at the point of tangency that one unit of consumption given up today will permit investment yielding one unit of consumption in future. In other words, the real return (interest rate) is zero. As drawn, the resident is willing to save for the future despite a return on investment, which, though positive (steeper than
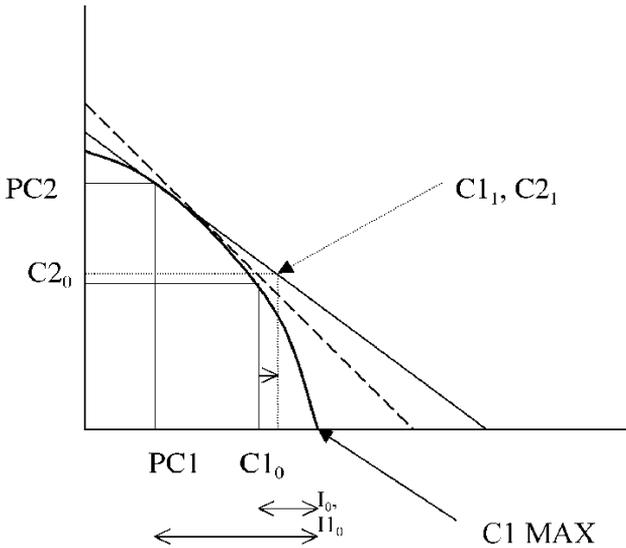
Figure 2: *High saving with capital inflow*

45 degrees) is low.

When the external financial sector is liberalised, capital inflows will occur if the international real interest rate applying to the country is lower than had been the case beforehand. The shallower tangent now shows this case with its implication that saving (buying foreign reserves) at this rate will now generate a smaller future return. Since returns on domestic investment exceed this rate at the initial equilibrium, it is optimal to increase the rate of domestic investment spending by diverting resources from consumption goods production in the current period. The net effect, therefore, is that the resident moves to the point where production of consumption goods in each period will be PC1 and PC2 and current investment spending rises to $I1_0$. At the new chosen combination $(C1_1, C2_1)$ consumption is higher than previously, with the excess of present period consumption over production $(C1_1 – PC1)$ implying international borrowing that will be repaid with a trade surplus $(PC2 - C2_1)$ in the second period.

We saw in Figure 1 that consumption spending appeared to rise above the trend during the 1990s but, before turning to the actual investment record, it is worth noting that the representation as drawn in Figure 2 contains a potential contradiction. The capital inflows have clearly boosted investment spending, implying higher consumption in both periods, but the investment that permits this to take place has a negative real return at the margin (refer to the 45 degree line)! While negative real borrowing rates would clearly increase welfare along the lines shown, the question arising here is why foreign creditors would wish to lend at a negative real interest rate.

Assuming that this is not what external creditors would intend, the puzzle may be stated in the form of the following question: Is it possible (short of deliberate deception) that foreign lenders might have anticipated a positive real return while domestic residents observed a

negative one? An affirmative answer can be given if it is recalled that foreign lenders and domestic residents will judge their returns against future purchasing power over different combinations of goods. While it is normal to think of foreign lenders being concerned with earnings in relation to internationally traded goods, the domestic resident will be concerned with the cost of borrowing in terms of the mixture of traded and non-traded goods that comprises their investment and consumption activities.

In the current period of external borrowing (which finances only an increased supply of traded goods), residents must expect the relative price of non-traded goods to be bid up (since it is necessary to motivate an increased domestic supply of this component of expenditure). This well-known aspect of external resource transfers has less familiar implications for the calculation of the real interest rate confronting the resident. Strictly, the real rate was defined in Figure 1 in terms of (the single) traded good, but the rate relevant to the resident must be defined in terms of the domestic consumption basket with its non-traded component. If α is the share of the basket made up of traded goods, it is shown in the appendix that this expected real interest rate may be defined as follows:

$$r = r* + (1 - \alpha)(\dot{p}_r - \dot{p}_n)$$

The real interest rate facing the resident consumer is made up of the world real rate ($r*$ defined in terms of traded goods) and the expected inflation differential between traded and non-traded goods weighted by the share of consumption devoted to the latter $(1-\alpha)$. This is essentially the result derived in a more formal context by Dornbusch (1983) and the formulation has potentially significant implications for the analysis in Figure 2.

In the case of Malaysia's currency peg against the USD, we can simplify by assuming that the rate of price inflation of traded goods (the first item in the bracket) was near zero. If residents were assuming positive inflation of non-traded goods prices, the formula suggests that the real interest rate perceived by them could well have been negative, even though the international real rate was positive ($r*>0$). In order to add further horsepower to this mechanism, we might note that borrowers investing in KL real estate developments would anticipate a rise in the capital value of the office space they were creating. For such projects the perceived real 'user cost of capital' would very probably be negative. Capital inflows helped to promote investment spending, with a bias towards domestic (non-traded) activities.

On this analysis both parties turned out to have been making a mistake–investments were not making the necessary international returns at the margin and both lost in the crisis that occurred in 1997-98. To see if this analysis might be relevant, we can return to the long-run record of investment in Malaysia and see what evidence there is of a change in behaviour of this aggregate in the period leading up to the crisis. Figure 3 reports the (logarithm of) investment spending to GDP ratio over the 1960-2001 time period. Once again, there is clearly a trend (despite the considerable variability in the ratio) suggesting that the share of investment in GDP has been rising at about 2.5 per cent per annum. Referring to trend values as being 'normal' for the year, the implication is that investment represented around 14 per cent of GDP in the early 1960s, rising to 35 per cent plus by 2000 (the trend, not the actual, value). In addition to this relative growth two 'boom' periods show up, as they did for consumption, with particularly high investment taking place from 1990 to 1997.
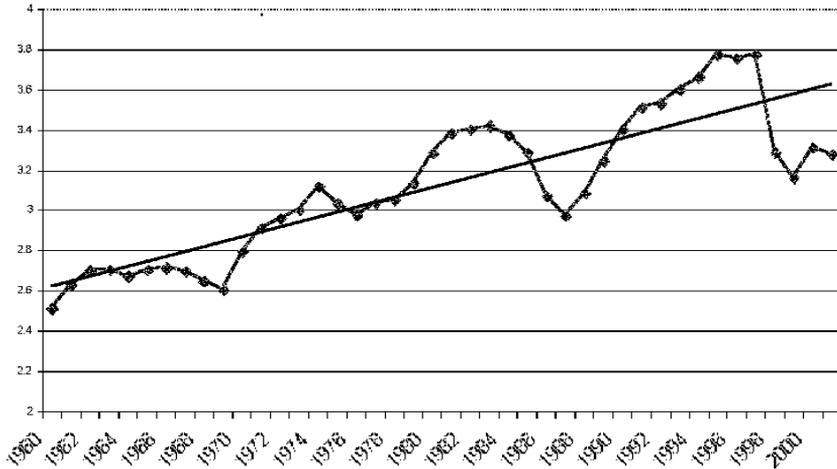
Figure 3*: Malaysia investment to GDP ratio (logarithms)*

A strong rise in investment spending is at least compatible with the pattern suggested by Figure 2, but what can be said about the return on this spending? One summary measure (the Incremental Capital-Output Ratio or ICOR) is the ratio of investment to the change in GDP, which indicates the amount of new capital needed to produce an increase in GDP. The ICOR can be decomposed as follows:

$$ICOR = \frac{I}{\Delta GDP} \equiv \frac{I}{GDP} \cdot \frac{GDP}{\Delta GDP}$$

From Figure 3, the trend investment spending to GDP ratio has been rising (the first term of the ICOR decomposition), while the underlying growth rate of GDP appears to have been constant at around 6.7 per cent per annum (Figure 1). The implied trend in the ICOR is therefore calculated by multiplying the trend value of the investment GDP ratio by the (inverse of) the (constant 6.7 per cent) underlying growth rate of GDP. Thus calculated, the trend ICOR grew from 2.0 to 2.5 between 1960 and 1970 and had reached four by the late 1980s. Between 1992 and 1997, the period when the trend was markedly below the actual ratio of investment to GDP, the trend ICOR value grew from 4.5 to 5.0. Had the actual ratio been used for this sub period, the ICOR would have been significantly higher and, on rough calculations, would have suggested that Malaysian investment spending at that time was less productive than in the USA.

In providing some support for the real interest rate 'mistake' interpretation of the pre-crisis period offered in Figure 2, this evidence also casts some light on the issue with which we began: domestic investment versus foreign asset (reserve) accumulation. With her high saving rate, Malaysia was already pressing the boundaries of viable investment spending by the early 1990s, and the inflows caused her to breach the boundary. Rather than being a capital importer, as then occurred, her more natural role is that of a capital exporter.

4.   Domestic Development: The Role of Capital Exports

The conclusion just reached may seem paradoxical for a country that is not yet fully developed. Malaysia's installed capital stock per head will ultimately be considerably larger than it is today and the theoretical expectation would be that the rate of return to investment should be higher now than in the future. Why, therefore, should Malaysia export her capital when she could be accumulating more plant and equipment at home? An answer to this question was suggested earlier in connection with Figure 2. That is, as the rate of investment spending in the first period rises, the effectiveness of the investment may be expected to decline if absorptive capacity at any one time is limited.

In these circumstances, Malaysia's high saving rate will tend to allow domestic investment to rise to the point where expected returns are no higher than the returns available on international investment. At that point, the surplus funds would need to be placed abroad, at least until they could be profitably used at home. But the foreign rate of return on (say) US Treasury securities may well be low (as at the moment). Anything that could be done to boost the return to domestic investment would therefore be highly desirable. On the other hand, since Malaysia's liquid foreign exchange reserves are probably already excessive for the insurance services they are likely to yield, a diversification of Malaysia's international portfolio allocation appears to be called for.

Turning first to the need to boost returns on investment in Malaysia, three elements can be distinguished in the light of recent press reports:

1. To improve overall investment performance, it is probably necessary to reduce the share of investment currently absorbed by the public and quasi-public sector. IMF data, for instance, suggest that public sector investment accounted for around two-thirds of total investment in 2003. The comparable figure was 'only' 42 per cent in 1998, and it is clear that public investment has risen in part to fill the gap left by a slump in private investment. Nevertheless, press controversy surrounding the performance of Khazanah Nasional, Malaysia's state investment group, suggests that its associated public sector companies, such as Telekom Malaysia and the power group Tenaga Nasional, are characterised by poor management and over-staffing. With the complaints that arose in the business sector when illegal foreign workers were expelled in October 2004, it is clear that Malaysia has relatively full employment. Workers, as well as investment, need to be transferred from the state sector to more productive occupations.

2. While a first priority must be to move investment to the most productive sectors, the second must be to raise the absorptive capacity of those sectors for further investment. The ICOR measures used above seem to point to a finding that has been noted elsewhere. Malaysia's growth to date has relied very heavily on increased capital and labour inputs (70-80 per cent on one estimate) rather than on the productivity of investment and labour (no more than 30 per cent). Research in Malaysia suggests that the key to improving investment productivity (lowering the ICOR) must lie in a higher rate of enrolment in tertiary education and a much greater focus on scientific and technical subjects for those who enrol. A survey observation recently was that perhaps as much as 8-10 per cent of manufacturing output was currently being lost due to skill shortages.

3. In the rather longer term, then, investment resources will need to have been withdrawn

from inherently less productive activities, and the supply of an educated workforce will need more closely to match demand. After this has been achieved, the ultimate challenge for Malaysia will be to sustain a 7 per cent growth rate (say, between 2010-2030) on the basis of genuine advances in knowledge and expertise. This would seem likely to arise in those industries where Malaysia chooses to establish a fully internationally competitive presence. It is impossible to mention this long-term perspective without recognising that China's trading emergence will oblige Malaysia to make these dynamic adjustments to the structure of her export sector.

Realistically, such major structural transformations will take some years and, given Malaysia's high saving rate, a relatively prolonged period of accumulation of external financial assets might be anticipated in the interim. This will require us to return, finally, to the issue of the type of external financial portfolio that Malaysia should be attempting to accumulate.

Some suggestions as to how these distinct aspects of development strategy might be managed in a co-ordinated way can be derived from the portfolio diversification policy of the EPF that was mentioned at the outset. Addressing the efficiency of domestic capital formation and of international portfolio allocations in turn, Malaysia's saving performance implies that she will acquire eventually a large capital stock. In the normal course of events, the structure of the resulting economy will be quite different from that of the present day. In making domestic investment decisions, therefore, the country will need to consider her prospective, as well as her current international comparative advantages. In this connection, the Bloomberg report notes that the EPF is intending to invest in private equity in Malaysia – choosing companies in technology and healthcare that have a two- or three-year track record, and for which a KLSE listing is in prospect. Hopefully, such investments will reveal areas of emerging comparative advantage that will become more significant as capital continues to accumulate and as Malaysia adjusts to the international competitive influence of China.

With absorptive capacity limiting this rate of domestic accumulation, it is now appropriate to ask what would be the best direction for international portfolio allocation. By suggesting that the return to investment is likely to be higher in countries where it is most scarce, theory would suggest that some of the EPF's new portfolio allocation to Asia-Pacific equities should go to countries that are less developed than Malaysia. Indeed, Malaysian entrepreneurs might be involved in those developments as they seek cheaper production locations. While investments in China are the obvious possibility, the three countries of Indochina might also be expected to be attractive if suitable investment targets can be identified.

Finally, it might be asked whether financial investment by Malaysia could be placed to advantage in more developed economies in Asia (including Japan) or, even, in western stock markets. This is a suitable question with which to end because, whereas investment in China, or (say) Vietnam would reflect investments in countries whose patterns of comparative advantage Malaysia is leaving behind, investment in Japanese or western markets would reflect those patterns to which she is moving. While Malaysia's high saving rate may well lead to some natural portfolio diversification in this direction, a stronger case might be made if the investments in developed countries were to aid Malaysia's own transition to developed country status. Insofar as these investments could facilitate Malaysia's emerging areas of

comparative advantage, possibly by easing the absorptive capacity constraints referred to earlier, they could be very worthwhile in economic terms.

To provide a possibly leading example of this mechanism, the MITI web site notes that the life sciences industry in Malaysia is at the embryonic stage. Nevertheless, a case could be made for suggesting that this sector should form a much more central development objective than it has done to date. In addition to an effectively unlimited global market for new health treatments, the botanical richness of the country's tropical forests is one aspect of this case in that it suggests a source of comparative advantage that is less likely to be eroded by new Asian competitors. Needless to say, expansion of this industry will require a major commitment to the provision of higher education in the biological sciences.

At a recent conference in Singapore, the Science, Technology and Innovation Minister argued that the two states should co-operate in developing Malaysia's biotechnology industry, with explicit reference to meeting the trading challenge posed by China and India as mass manufacturers. Strikingly in this connection, a glance at the price-earnings ratios of western pharmaceutical companies (for instance, Astra Zeneca) on the LSE reveals values of around 18. This is a modest figure in relation to those observed on the KLSE. Strategic purchases of western firms in the life sciences sector would not, therefore, be too expensive and could greatly facilitate the emergence of a major new area of activity in Malaysia. This phenomenon of high-saving Asian countries anticipating the development of their comparative advantages and facilitating their emergence by buying western firms is already evident in the case of China – a much poorer country than Malaysia in per capita terms. Should Malaysia employ international portfolio allocation to this end, it would become directly relevant to determining the path of the country's domestic development.

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Appendix
The Real Interest Rate with Non-traded Goods

Adding and subtracting the rate of expected depreciation of the exchange rate to the definition of the *real* interest differential implies

$$r - r* = (i - i* - \overset{0}{e}) + \; [\overset{0}{e} - [\overset{0}{p} - \overset{0}{p}*])$$

Expected real interest rates will therefore be equated (LHS = 0) when (a) uncovered (nominal) interest rate parity is expected to obtain (the first bracket on the RHS=0) and (b) expected purchasing power parity is also expected to be maintained (similarly for the second bracket).

If the domestic consumer price index is a geometrically weighted average of traded and non-traded goods, domestic inflation is

$$\overset{0}{p} = \alpha \, \overset{0}{p}_T + (1 - \alpha) \, \overset{0}{p}_N$$

Alpha is the weight accorded to traded goods. Substitution of this expression for domestic inflation in the first definition yields the expression in the text, assuming that foreign inflation is zero, traded goods follow PPP and that UIP is maintained.