FUTURE GLOBAL CAPITAL SHORTAGES:
SOME KEY ISSUES AND POLICY RECOMMENDATIONS

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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I. The Future of Saving and Investment in OECD Countries

There has been a significant decline in total saving in the OECD area as a whole over the last 30 years or so. The average gross national savings rate has fallen by about 4 percentage points of GDP. The fall in net saving has been even sharper: Bosworth (1995) calculates that it has slipped from around 15 per cent of net domestic output during the 1960s to its current level of about 7 to 8 per cent. The decline is visible at all levels - national, government, private and household. There are, however, important differences among the major OECD regions. More than half the decline in European and US national saving rates can be accounted for by developments in the public sector. Government saving in Europe fell from a surplus of almost 4 per cent of net national product in the 1960s to deficits of around 2 per cent since 1980. The US went from a small surplus in the 1960s to deficits of between 3 and 5 per cent of net national product. Japan, by contrast, maintained and even increased its public saving through the 1980s and early 1990s.

The fall in saving across the OECD has been paralleled by a general decline in investment rates -- more pronounced in net than gross terms -- concentrated largely in the private sector. What is striking is that the fall in the investment rate in the US has been less sharp than that in the national savings rate; precisely the opposite holds for Japan; in Europe saving and investment rates have declined steadily more or less in tandem. Nonetheless, for much of the period in question, private saving has outstripped private investment in all three of the major OECD regions, so that the OECD as a whole has been in private savings surplus since the early 1970s. However, OECD governments have on aggregate been running budget deficits since the mid-1970s. As a result, total saving and investment OECD-wide are in approximate equilibrium, rather than in savings surplus.

How are savings likely to develop over the next 30 years? The crucial group of actors will be households, who account for the lion’s share of total private savings. Their propensity to save depends on an important extent on the age composition of the household members. Industrial countries can expect a considerable degree of ageing during the first half of the next century with significant differences among countries. The share of over-65s in OECD populations is set to increase from 12.9 per cent in 1990 to 22.5 per cent in 2030, whereby Germany, Italy, Japan, the Netherlands and Switzerland are likely to experience the highest shares of elderly in the OECD-area, all with rates above 26 per cent. At the same time, between now and 2030 overall populations will probably begin to stabilise or decline, though the timing will differ by country.
Within the G-7, for example, the populations of the United Kingdom and France are expected to remain relatively constant; in Japan, Germany and Italy total populations could fall significantly; North America’s population will continue to grow, but level off towards the end of the period.

Changes to the private saving rate are likely to come mainly from three sources: from changes in the age composition of the populations (personal savings vary over the life cycle); changes to the age-income distribution (income, too, varies over the life cycle, influencing the rate of savings from one age-group to another); and changes resulting from cohort effects (income and saving characteristics specific to certain generations, e.g. the baby boomers). Over the long run, the aggregate household saving rate is likely to remain more or less unaffected by population ageing as reflected in the age-composition effect. The income effect, on the other hand, will be positive but small. It is the cohort effect which will have the greatest influence: in OECD countries, the baby-boom generation is either earning much higher real incomes than previous generations, or has a higher aggregate saving rate, or both.

Projections by Börsch-Supan (1995), taking all three effects into account, indicate for the period up to 2010 slightly increasing private saving rates in Japan, a small decline in saving rates in Germany, and a significant increase (over one full percentage point) in US saving rates. These three countries combined account for almost two-thirds of total OECD wealth, so that the saving behaviour of their populations determines in large measure the saving outcome of the OECD-area as a whole. It would follow from this that between 1990 and 2010 the OECD-wide private saving rate would remain virtually unchanged or increase slightly. This contrasts with findings based on the life-cycle hypothesis which point to a fall in aggregate saving over this period. After 2010, largely as a result of the retiring of the baby-boom generation, household saving rates decline (perhaps by around two percentage points), most strongly in the US.

Ageing populations are set to put considerable pressure on public spending programmes and as potential GDP slows, these pressures will be harder to bear for the economy as a whole. Moreover, high debt levels and associated debt servicing payments are likely to exacerbate the fiscal pressures. As Leibfritz et al. (1995) point out, the size of these effects varies among the OECD countries, depending on differences in fiscal starting positions, in the degree of ageing and in the exposure of government budgets (especially pension systems) to ageing. Pensions expenditures play a major role in Japan, France and Italy, rising by 7 percentage points or more between 2000 and 2030. In the US, UK and Canada, pensions play a smaller role. However, health care expenditures rise much more steeply in North America than elsewhere.

The combined effect of demographic changes and high starting levels of indebtedness could, in the absence of appropriate policy action, set a number of OECD countries on an unsustainable debt trajectory towards 2030. Public debt levels could, theoretically, climb to 100 per cent of GDP in the US, 150 per cent in France, 170 per cent in Japan and 200 per cent in Italy.

Private demand for investment funds in the OECD area is difficult to project. Assuming balanced growth in which the capital stock expands in line with output (a somewhat heroic assumption, since factors such as the progressive structural shift in OECD economies to services may in fact reduce capital intensity), investment demand should, broadly speaking, be determined principally by two factors: labour force growth, and growth in total factor productivity (TFP). Virtually all industrialised countries will experience a significant slowing of workforce growth in the 1990s and the first decades of the 21st century. Labour force growth in the US is expected to fall from an average of 1.6 per cent in the 1980s to around 0.3 per cent in 2020-30. Japan’s labour
force will actually start to shrink early in the next decade, followed by Europe’s from about 2010 onwards.

Guessing the future trajectory of TFP is particularly problematic, especially its qualitative component. On the one hand, a shrinking labour force could imply a decline in capital accumulation per worker, and thus a fall in demand for capital investment. On the other, technological change may increase with population ageing and shrinking workforces, in order to offset the negative implications of labour scarcity. The assumption is therefore often made that it is reasonable to expect TFP growth to continue at the rate of the last decade. The overall result is likely to be a small but significant slowing of output growth in OECD countries over the next few decades, implying a further decline in rates of private investment. This aggregate decline, however, is likely to be somewhat stronger than that in private saving rates, so that the private sector will probably continue to generate a net saving surplus.

Pulling these various strands together produces the following broad picture. Household savings increase during the next 10 years or so, then level off and decline somewhat so that they reach the 1990 level by around 2020. The only noteworthy budgetary surplus is likely to be that run by Japan, currently a small but not negligible component of OECD capital surplus which is set to decline over the first decades of the next century. As noted above, net investment will evolve at a lower rate than private saving, generating a private saving surplus over investment. This surplus, however, is entirely wiped out by mounting public deficits as the turn of the century approaches. According to Börsch-Supan (1995), the gap could open up even further, when projected demand for funds exceeds projected supply by about 50 per cent by 2010, and by about 90 per cent by 2020. Beyond 2020 the situation could worsen further as the baby boom generation retires, saving rates decline, and dependency ratios and social expenditures increase.

Using estimates produced i.a. by Börsch-Supan (1995), McKinsey Global Institute (1994) and the World Bank (1995), these trends translate into the following orders of magnitude. Over the next 15 years, private savings in the OECD area should average out at around US$ 1 200-1 300 billion per annum, of which about US$ 1 000 billion will be claimed by annual net investment. If OECD governments succeed in controlling public sector expenditure, overall saving and investment will remain broadly in balance. However, if the growth in government spending goes unchecked, public deficits could run to about US$ 700 billion per annum over the 15 year period. In other words, the OECD area would suffer from an ex-ante financing shortfall of US$ 400-500 billion a year (equivalent to about 2 per cent of GDP). Between 2010 and 2020, the situation could deteriorate further as growth in private savings levels off and both indebtedness and deficits in the public sector accelerate, leading to an annual ex-ante shortfall of around US$ 1 000 billion.

To a large extent, of course, this is a purely fictitious situation, for three important reasons. First, the many imbalances which emerge from this simple extrapolation generate feedback effects (e.g. changes in interest rates, in saving, investment and consumption behaviour, in the rate of technological change, etc.) which trigger general equilibrium corrective processes. Second, there are bound to be policy changes which will try to counteract the most pernicious effects of such imbalances (see Section IV below). And third, OECD countries do not operate in isolation from the rest of the world; they are part of a highly globalised, interdependent world economy in which countries outside of the OECD area play an increasingly important role.
II. The Long-term Outlook for Saving and Investment in non-OECD Countries

While savings have remained broadly in line with investment in non-OECD countries as a whole, saving and investment balances have evolved differently across regions. Thus, many of the dynamic Asian economies (with saving rates often well above 35 per cent of GDP) have not only proved to be self-sufficient in terms of domestic savings, but they have also made their mark as capital exporters. As a group, developing countries in East and South East Asia have been running current account surpluses over the last decade, although these have declined considerably. India, too, has funded its substantial investments largely through domestic savings, in sharp contrast to the rest of South Asia which suffers from a chronic savings shortage equivalent to about 5 per cent of GDP. Latin America reveals a mixed picture, with some of the larger economies (Brazil, Chile) running a domestic savings surplus, and others (Argentina, Venezuela) a shortfall. Russia has a massive savings overhang (amounting to 6-7 per cent of GDP, according to some estimates) a large portion of which is kept in hard foreign currencies; and, as the contributions from Ehrlich et al. (1995) demonstrate, the Central and Eastern European economies show, in general, a substantial savings deficit.

The longer term prospects for private saving in non-OECD countries will be determined, broadly, by income growth and by demographic factors. Again, there are likely to be very considerable differences among countries and regions. East and South East Asia, for example, is likely to see some slowing of growth as economies mature (from about 7.5 per cent per annum over the period 1994-2000, to around 6.5 per cent over the first decade of the next century), while the bigger Latin American economies should show some improvement over the next 10-15 years. Populations in non-OECD regions will remain very much younger than those in OECD countries, but within the former group China, for example, will age very much faster than Brazil or India.

The interaction of income growth and demographic change should, on aggregate, provide a positive impetus to savings in the emerging economies over the next 10-15 years. East and South East Asia is an interesting case in point. According to Lam and Teh (1995), somewhat slower growth is expected to depress saving rates, but by very little -- around 0.2 of one percentage point. Demographic factors, on the other hand, could well lift saving rates in China and South-East Asia by full five percentage points, reflecting the strong likelihood that falling young dependency ratios will easily offset rising elderly dependency ratios. Hong Kong, Chinese Taipei and South Korea will also see saving rates increase until the turn of the century, but they will subsequently fall back to current levels. The average outcome for the region is likely to be that gross savings as a proportion of GDP will rise from their current level of 33 per cent to around 36 per cent by 2010, although a question does remain as to whether the growth in savings may eventually slow as financial liberalisation in Asia takes hold. If economic growth rates hold up in the Latin American countries with very young populations (Brazil, Venezuela etc.), saving rates there could increase by as much as one third by the end of the next decade. In Eastern Europe, household saving rates are very low in many countries -- e.g. single digits in Poland and in the Czech and Slovak Republics -- but, as Ehrlich et al. indicate, they are expected to rise steadily in the next few years.

Government balances in non-OECD countries are likely to show diverse patterns of development over the next 10 years or so. The dynamic Asian economies as a group (without China) generally tend to run budget surpluses; they are likely to do so for some years to come although the surpluses are set to diminish progressively. As for the major Asian players, India and China are running budget deficits (6 and 1.5 per cent of GDP respectively) which are unlikely to
improve substantially in the medium term. Non-OECD Asia as a whole, therefore, is likely to continue to run a small budget deficit. Latin America will largely be dominated by events in Brazil, Argentina and Chile. Given the structural reforms introduced in the latter two countries and the Brazilian government’s recent actions on constitutional reforms to ensure a balanced budget for 1995 and beyond, budgets in the region as a whole look set to remain broadly in balance over the coming years. Central and Eastern European countries are currently running sizeable budget deficits: Bulgaria, Hungary, Poland and the Slovak Republic have deficits of between 4 and 7 per cent of GDP; Russia’s deficit is equivalent to about one tenth of output. The Eastern European countries’ prospects for reducing their deficits are mixed. In 2005, Poland’s is unlikely to have changed, but Hungary and the Slovak Republic will probably have cut their deficits significantly. Russia, too, is aiming to make substantial inroads into its public sector deficit.

Over the next decade, then, governments in non-OECD countries are, on aggregate and with some notable exceptions, not likely to make very great demands on funds through dissaving. Clearly, however, much will depend on budget management in the major emerging economies of Brazil, China, India and Russia.

Looking further ahead, i.e. beyond 2010, government budget positions in non-OECD countries could nonetheless come under pressure, not only from the continuing need to invest in infrastructure and the environment, but also as a result of demographic change. At present, populations in these countries are very much younger than those in the industrialised economies. The share of over-60 year olds OECD-wide is just less than 20 per cent. The corresponding figure for Latin America is about 7 per cent, for Asia around 8 per cent, and Sub-Saharan Africa approximately 4 per cent. This age gap will not close significantly before the end of the next century. Nonetheless, many non-OECD countries will start to experience ageing very soon. Between 2000 and 2030 China’s elderly will more than double their share of the population to around 22 per cent; Chinese Taipei’s and Korea’s will more than double to about 26 per cent; and Singapore’s will almost treble to 30 per cent. Brazil’s elderly are set to double their share to 17 per cent. The rise will be less steep, but nonetheless significant, among Central and Eastern European economies.

The impact on public expenditures could be dramatic. For example, projections of public pension spending (based on the assumption that the current relationship between demography and spending continues) suggest that expenditures will rise rapidly in non-OECD countries from about 2010 onwards. The increase will be particularly severe for China (from around 5 per cent of GDP in 2010 to about 12 per cent in 2030) followed by Latin American and the rest of Asia. Similar hikes may be expected for other life-cycle related public expenditures such as health care.

In summary, as far as the next ten to fifteen years are concerned, aggregate savings in non-OECD countries should hold up well. Further down the road, however, it may prove difficult to maintain overall saving rates at these levels as government calls on funds mount with older populations and rising living standards.

It is very likely that over the next decade many of the larger developing countries, as well as some of the transition economies, will succeed in sustaining or increasing economic growth rates, and that these growth rates will be underpinned by expanding private investment which will equal or exceed current rates. The expected increase in investment opportunities derives from a number of factors. First, the younger populations of Asia and Latin America provide an excellent foundation for dynamic economic development both as a workforce and as consumers. Second,
many of these countries suffer from a critical shortage of infrastructure -- transport, energy, telecommunications, etc. -- which will be compounded by the rising trend to urbanisation. As this infrastructure is put in place, the capital absorption capacity of these economies will increase. For Asia, there are estimates that US$ 3 000 billion in infrastructure investment will be required between now and 2010 to sustain economic growth rates; and Latin America’s infrastructural investment requirements are put at US$ 60 billion annually. In addition, the explosive development of populations in Sub-Saharan Africa will place enormous strains on basic infrastructures, such as housing, water and energy.

Third, numerous emerging economies are expected to invest quite heavily in environmental improvements, both as a response to external pressure to comply with international norms, and to domestic pressure for a cleaner environment as standards of living rise. And fourth, many of these countries are undertaking significant economic reforms. India, for example, has efforts underway to liberalise its financial system, easing restrictions on private banks, permitting the establishment of new institutions, and opening the stockmarket to big institutional investors. In China, policy reform is continuing. 1994 saw major reforms of the financial system, the currency and foreign exchange systems and the trade policy framework. Further measures are in the pipeline to give the economy more exposure to foreign trade and investment, and the policy agenda to the end of the century includes wide-ranging reforms of state-owned enterprises, macroeconomic management and market regulations. In a number of Latin American countries, structural reforms including privatisation of utilities, improved regulation of markets and a move to more open financial regimes, have been implemented in recent years. As all these changes feed through into greater efficiency and productivity gains, investment opportunities in non-OECD countries should pick up even further.

The upshot is likely to be a significant increase in the proportion of GDP devoted to investment over the next decade. Steep rises are expected in East and South East Asia, where very considerable investments in infrastructure and environmental improvements are projected. Lam and Teh (1995) project that, as a result, investment rates should increase from their current regional aggregate of 33 per cent of GDP to 36 per cent in 2000 and 37 per cent in 2010, i.e. a full percentage point above expected saving rates. Substantial climbs in investment rates are also likely in the big Latin American countries. And significant increases of up to one third are likely in rates of gross fixed capital formation in some of the Eastern European countries, notably in Hungary and Poland.

Thus, future investment rates are expected increasingly to outpace saving rates in most key emerging economies in non-OECD regions in the coming years. The annual average ex-ante saving-investment "gap" through to 2005 is estimated by the World Bank at between US$ 150 and 200 billion. The bulk of this (about US$ 50-60 billion per year) is likely to occur in Asia, implying a significant turnaround for the dynamic Asian economies who are likely to move from a relatively balanced saving-investment situation to one of an ex-ante saving shortfall over the next 15 years. Latin America is also likely to see potential investment demand outrun potential savings (to the tune of around US$ 50 billion annually). Russia and Eastern Europe, with their continuing low absorption rates, are not expected to exceed average ex-ante saving shortfalls of US$ 10 to 15 billion per year through to 2005. The aggregate saving-investment gap in the remaining developing countries is anticipated to be in the same order of magnitude as for Asia and Latin America.

After 2010, the saving investment imbalance in non-OECD countries could deteriorate further as ageing sets in and government calls on funds increase.
III. Global Capital Requirements and Capital Flows

The broad world picture that emerges on piecing together the long-range assessment of saving and investment in the OECD and non-OECD areas depends crucially on the time horizon adopted.

Looking first at the next 10-15 years, it is possible that, in the absence of any notable success in reining in public deficits and debt, which threaten in the longer run to erode the private saving surplus, the OECD-area as a whole could find itself facing an *ex-ante* saving-investment imbalance in the order of US$ 400-500 billion a year. However, as was noted earlier, an *ex-ante* shortfall of this magnitude is unlikely to materialise given that self-equilibrating forces will get to work and that some corrective government measures are already in the pipeline in many OECD countries which should contribute to a consolidation of finances in the public sector. Hence, in the OECD area, saving and investment are expected to remain broadly in balance.

Outside the OECD area, there are grounds for anticipating the emergence of growing saving and investment imbalances which could trigger increasing net external capital demands. On one estimate, non-OECD countries would require between 1994 and 2004 a cumulative inflow in the range of $1.5 trillion from the OECD area in order to finance growth and especially the massive infrastructure requirements and environmental improvements that generally accompany industrialisation, urbanisation and mass-consumption at higher incomes. Even though this may still prove a strain on the absorptive capacity of transition and developing economies, it is a fairly modest sum relative to the OECD area’s cumulative prospective savings (2.7 per cent) and GDP (0.6 per cent).

Over the longer term, however, i.e. after 2005/2010, there are a number of forces -- partly inter-related, and including population ageing, public sector dis-saving and the rapid pace of development -- that threaten to generate large imbalances and could put substantial pressure on global capital resources and world interest rates.

Clearly, large global imbalances could eventually unwind in many different ways, generating very different outcomes. The market mechanisms and policy reactions involved are illustrated here -- albeit in highly simplified form -- through two scenarios. One describes how a virtuous spiral of government policy, market reaction and capital flows could produce substantial benefits for investment and economic growth world wide, the other how a vicious spiral might develop, with severe consequences for interest rates and growth in both OECD and non-OECD economies. [See also McKinsey Global Institute (1994)]

In "virtuous circle", private savings rates in OECD countries are maintained at current or slightly higher levels through to 2010 or thereabouts, showing no decline as a result of demographic change. OECD governments succeed in further reducing budget deficits and in keeping social expenditures and indebtedness at manageable levels. As a result, only about half of private savings are used by governments to finance public expenditures. The rest is available for investment in the domestic economies and in non-OECD countries. Meanwhile, growth holds up in the non-OECD regions and economic reforms continue, so that *ex-ante* investment outruns savings. With rates of return on investment in developing and transition economies exceeding
those in OECD countries, and with risk premiums falling as economic and political stability take root, increased private savings flow from the latter to the former. As from 2005/2010 the cumulative investment of OECD savings in emerging economies results in high levels of incomes flowing back to industrialised countries to bolster the incomes of ageing, retiring populations. This in turn alleviates some of the pressure on government by reducing social expenditures and raising tax revenues, so that government debt becomes increasingly manageable. In the intervening period growth has been sustained in the non-OECD area and incomes both here and in the industrialised countries have benefited further from intensified trade and investment links. The additional income allows saving rates in OECD countries to be maintained, so permitting a continuation of high levels of investment and income flows between OECD and non-OECD countries.

In "vicious circle", OECD private saving holds up, as does the savings surplus. OECD governments fail to make satisfactory progress towards getting public sector expenditures under control. Debt equivalent to over two thirds of private savings has to be raised to finance public expenditures and service debt. Less of the stock of household saving is therefore available for private domestic investment and capital export. In particular, considerably less is available for channelling to non-OECD countries. Economic growth in these countries falls well short of potential, as does trade between OECD and non-OECD regions. Income flowing back to the industrialised countries from investments in and trade with developing countries are insufficient to permit substantial cuts in social expenditures or significantly to raise tax revenues in the OECD countries. Consequently, there is no relief from continuing pressures on public deficits. The world economy finds itself locked into a high-interest, slow-growth circle.

These are by no means extreme scenarios. For example, an ideal scenario would be one in which the cohort effect on OECD household savings proved greater than foreseen, thanks to many baby-boomers remaining active long after retirement age; in which governments made deep and rapid inroads into public deficits; and the balance between funds flowing to domestic investment opportunities and those flowing to non-OECD countries tilted further to the latter. A worst case scenario could be constructed in which OECD deficits get so out of hand that they quickly became unsustainable and some countries fall into the classic debt trap, triggering a downward spiral of events.

Given the potential for ex-ante saving and investment imbalances starting mid-way through the next decade, these scenarios highlight two central concerns. To begin with, substantial ex-ante saving and investment imbalances may heighten the vulnerability to shocks of economies facing the task of financing significant debt loads and thereby possibly contribute to capital market volatility. Moreover, one of the most probable reactions will involve a hike in interest rates. Whether or not higher real interest rates act as a general impediment to growth or simply provide a more rigorous hurdle for investment projects to clear is a matter of debate. Nonetheless, several issues warrant attention. First, should technological change remain a driving force behind investment trends, higher real interest rates could inhibit diffusion and thus reduce potential increases in productivity and growth rates. Second, risk premiums need to be factored into the picture because they may compound the effect of higher real interest rates, particularly when looking at investments in innovation. Third, those countries or regions where informational and institutional uncertainties are higher will also have to contend with the burden of adding any increases in real interest rates to already high premiums. Lastly, there is the severe fiscal problem posed by high real interest rates on the servicing and repayment of public debt.
IV. Policy Implications

What follows from the scenarios in the previous section is that government policies have a crucial role to play in ensuring that potential global imbalances unwind satisfactorily. Five areas for policy action stand out.

First, a positive global outcome to equilibrating potential imbalances hinges to an important extent on OECD governments’ efforts to consolidate public sector finances and, in particular, reduce in a timely manner the level of indebtedness. As was observed in the first section of this paper, if current trends continue, fiscal positions in a number of OECD countries will deteriorate sharply early next century leading, in some instances, to unsustainable situations by 2010-2015. Establishing a good fiscal position before the onset of the full effects of ageing is vital for setting public sector finances on a sustainable trajectory. Moreover, the sooner action is taken to redress public finances the better, since public sector reforms usually require long lead times, and the early implementation of measures would maximise the period of time available to all those concerned to adjust to the necessary changes in saving and spending decisions.

Heading off government dis-saving calls in particular for redoubled efforts at reforming social transfer systems to the elderly, notably pension systems and health care provision and financing. Special attention should be paid to the need to alter the formula-driven spending schemes established during past periods of rapid economic and tax revenue growth. Other policy options, such as raising participation rates, increasing inward migration of workers, etc. may lead to an improvement in fiscal positions over the long term, but their effect is not as direct or as immediate as timely intervention on specific public expenditure items. Raising taxes would probably prove particularly problematic given existing concerns about already high overall tax burdens in the OECD area.

Second, some redesign of tax systems should be considered to make saving more attractive. In many OECD countries there is still considerable scope for progress in shifting the tax system in general away from income-based towards consumption-based levies. Special incentives to encourage saving, on the other hand, have seldom achieved their goal. Suitable design changes might also attempt to take into account the more subtle and nationally distinctive inter-relationship between various payroll and social security payments and household savings.

Third, in the non-OECD countries, an increased influx of capital cannot be handled efficiently and effectively and intermediation cost for the economy as a whole cannot be brought down unless well-functioning financial infrastructures are in place. Financial structures in non-OECD countries are frequently in need of improvement, requiring more competitive financial sectors, higher levels of financial competence and more effective and reliable accounting, legal and supervisory skills. With a broader range of services and better practices, productivity levels could be greatly improved. In Latin America, for example, it is estimated that productivity in banking is only about one quarter of US levels. The diversification of financial instruments in many developing countries and transition economies is also in need of improvement. The lack of long-term debt facilities (i.e. 30 years) in Asia is a case in point. While foreign money is flowing freely into Asia at present, it is heavily biased in favour of portfolio investments in regional stockmarkets and direct equity stakes in manufacturing or service businesses. Unless sufficient long-term debt can be attracted to leverage up the abundance of private equity, the burden of financing major infrastructures could revert to governments. Taxes, government borrowing and/or
fiscal deficits might have to rise as a result. Thus, it is necessary to forge ahead with the development of domestic bond markets. Asian debt-rating agencies will need to be established, and better access allowed to international rating agencies.

Fourth, there would seem to be scope for both OECD and non-OECD countries to review regulations governing the flows of portfolios held by large financial institutions, notably pension assets, as these constitute a massive potential source of capital for emerging economies. At present, pension assets in the OECD total more than US$ 6 trillion. That figure is likely to double by the year 2000, and to continue growing at a rapid pace subsequently, as the baby-boom generation moves into what is probably its most savings-intensive phase. The share of foreign securities in these assets is small -- around 5 per cent in the US, (which accounts for almost three-fifths of total OECD pension fund assets), 4 per cent in Germany and 8 per cent in Japan. These shares will have to increase if pension fund managers are to reap the diversification benefits that can be obtained from investing in the stockmarkets of the emerging economies. This can only be done on a significant scale, however, if regulatory and market barriers are lowered, enabling some correction to be made to the home bias of OECD pension assets and the associated relatively low returns. Policy makers in the emerging economies, for their part, would need to loosen the legal and market impediments to pension fund investment in their own countries. Otherwise, institutional investors will remain wary of sovereign risk and problems of stockmarket liquidity.

Fifth, and finally, it is important for both OECD and non-OECD economies to look beyond the purely financial dimension in the quest for sustainable solutions to potential imbalances. Thus, there can be no sustainable solutions without continuous efforts to adjust OECD economic structures to the rapidly changing international and domestic environment, and in particular to the related twin challenges of globalisation and ageing. The reform momentum needs to be upheld across a wide range of policy areas aiming to provide the general economic and social conditions conducive to structural adjustment, investment and innovation. This includes enhancing access to markets for foreign products and services, improving the functioning of markets, modernising the human resource base, and strengthening scientific and technological systems. Similarly much depends on the ability of developing countries and economies in transition to expand investment opportunities that offer high rates of return. To achieve this, economic reforms aimed at liberalising and improving the functioning of markets and setting clearer investment incentives must continue. By the same token, and especially in the transition economies of Europe, further progress needs to be made towards strengthening institutional and legal frameworks and fostering an economic climate that is conducive to the expansion of the private sector.

Policy action along the five axes set out above could improve the prospects of ensuring that the resolution of future ex-ante saving-investment imbalances within and between OECD and non-OECD regions contributes to move the world economy towards a virtuous circle of saving and investment, efficient global capital allocation, and sustained economic growth.
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OECD INTERNATIONAL FUTURES PROGRAMME

Today’s decision makers face a complex and uncertain world, in which the assessment of the trends shaping our long-term future has become a formidable challenge. Economic, social and technological forces are combining to drive change along at great speed and in sometimes unexpected directions. A growing deluge of information is making it increasingly hard to discern the key factors affecting the long-term.

The OECD International Futures Programme is designed to help decision makers in government and industry come to grips with this challenge. The Programme offers a number of distinguishing features: improved monitoring of the long-term economic and social horizon, with early warning on emerging domestic and international issues; more accurate pinpointing of major developments and possible trend breaks; greater analytical appreciation of key long-term issues; and better dialogue and information sharing to help set policy agendas and map strategy. All of this is backed up by the OECD’s unique experience and capacity for in-depth analysis across a wide range of policy areas of keen interest to governments.

Established in 1990, the Programme consists of four interrelated and mutually supportive elements:

- **OECD Forum for the Future**: a platform for informal high level meetings with the aim of testing new ideas, developing fresh perspectives on problems and advancing the understanding of strategic economic and social issues.

- **OECD Futures Projects**: focused, multidisciplinary research and policy analysis on special themes, largely as spin-offs from Forum for the Future conferences.

- **OECD Future Studies Information Base**: a documentation system providing in succinct form the key findings and conclusions of published and unpublished literature selected from the worldwide output of futures analysis.

- **OECD International Futures Network**: a global network of some 600 people in government, industry and business, and research institutions who share a common interest in long-term developments and related policy issues.

The OECD International Futures Programme is only partially financed through the ordinary budget of the Organisation. A major part of its funding is based on voluntary contributions from governments of OECD Member countries and on grants from enterprises and foundations.