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Financial Markets and Economic Growth

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Thinking about economic development has evolved over the past half century, partly in response to perceptions of poverty and theorizing about its causes (and inferring from those the presumed needed policy actions) and partly through the experience of development in countries both successful and unsuccessful. During these years, there have been a number of "fads", or virtually single causation theories, as to "the" causative factor (or, perhaps, two factors), largely in response to perceptions that development was less rapid than it should have been.

During the past decade, much of the "fad" and the emphasis has been placed on understanding the role of the financial sector, in part because earlier lessons were learned, and in part as a consequence of the financial crises of the l990s. Understanding of the role of the financial sector has increased markedly, but research and insights continue to mount. As that has happened, some have turned to "governance issues" as "the key" to development, but lessons about the importance, and key role, of the financial sector in development have certainly been learned.

There has been no time at which economists and policy makers denied the role of the financial sector. However, I think it is fair to say that its importance was systematically underestimated prior to the experience of the l990s. Certainly, I myself was guilty of nodding agreement with those who argued for its importance, while turning my focus almost immediately back to issues of trade, agriculture, public administration, and the like.

I start with a brief review of the earlier foci of analysis, noting how they interacted with understanding of development at the time. In the final part of my talk, I will then relate the earlier understandings and the role of financial variables in development. In between, I will come to financial markets, and the experience of the l990s, illustrating with some data from the Korean experience. I will end with an analysis of the policy implications of the improved understanding of the role of the financial system and its components.

Analyzing Poverty and Growth

Prior to the Second World War, analysis of economic growth was almost the exclusive domain of economic historians, and focus was largely on how the west grew rich – in particular, the industrial revolution. Although everyone knew that citizens of some countries had much higher living standards than those in others, that seemed to be taken as a "state of nature", not an issue to be addressed or understood.

And, indeed, there appeared to be some justification for that bipolar view. Few countries were in the "middle". Ignoring the centrally planned economies, which were generally seen as sui generis, the world was seen as consisting of the "developed" and the "underdeveloped" (subsequently less developed, then developing) countries. Ignoring a few mineral rich places, generalizations could be made that almost all developing countries had low per capita incomes, low life expectancies, low levels of literacy and educational attainment, poor health statistics, little capital stock and low savings rates, and an economic structure heavily skewed toward subsistence agriculture with exports consisting overwhelmingly of primary commodities and imports of manufactured goods.

From these stylized, but mostly valid, generalizations, came the initial "fad" in development: poverty and low productivity were rife because of low levels of capital stock

per worker; low levels of capital stock per worker resulted from the inability of poor people to save; and hence there was a "vicious" circle. The policy implications were seen, by most, to be that government had to take a leading role in development, and that development should be spurred by undertaking accelerated investments in industry (which was by hypothesis of higher productivity), doing so by increasing investment in both the public and the private sectors. The Government of India's Planning Commission, for example, concluded that, if India could reach a savings rate of 25 per cent of GDP within a quarter century, growth would accelerate sufficiently to result in economic development.

By the early l960s, there came recognition that capital accumulation was insufficient: attention had to be paid to augmenting "human capital", and the focus shifted to education and other factors (such as health and nutrition) that would increase individuals' productivity in all areas including industry but also agriculture. With the notable exception of a few East Asians, however, development policy remained heavily oriented to developing industry (in the public and private sectors) and raising rates of investment. Moreover, efforts to encourage industrial development focused on protection of domestic industry from imports through import prohibitions or restrictive import licensing and high tariff levels.

One result, which happened in most developing – as they were then called – countries was that chronic "foreign exchange shortages" resulted in gross inefficiencies in a variety of ways, and certainly were a disincentive for the development of any new export activities. It came increasingly to be appreciated by the l970s and l980s that an overvalued exchange rate itself was one disincentive for development of exports, but so too were high tariff levels and prohibitions or restrictions on imports. Some East Asian countries were already following a development strategy that focused on shifting away from "inner oriented" growth toward

"outer oriented" strategy. They experienced rapid growth of real output and exports, and were successful to a degree that had earlier not seemed feasible.

Hence, by the late 1980s, focus was on the reduction of trade barriers and an open economy as an essential part of the prescription for rapid economic growth, alongside education and other investments in humans, and high savings rates. At the same time, and both from direct experience and because of the collapse of central planning, skepticism grew regarding the efficacy of state-owned enterprises engaging in manufacturing activities. Recognition of the role of competition increased, although it was never a central fad.

With all of this, the experience of the East Asian "tigers" – Hong Kong, Singapore, South Korea, and Taiwan – was phenomenal. By 1990, South Korea had realized a rate of real economic growth that more than doubled per capita income every decade. The country, and others experiencing similar growth rates, was transformed. It no longer made sense to regard all non-industrial countries as homogeneous – a variety of distinctions (emerging markets, middle-income countries, etc.) came to be employed. But all those in the policy and academic communities concerned with development recognized the outstanding success of the "tigers" over a very long period of time. While they debated the relative contributions of different factors to those high growth rates, no one could doubt the sustained success of those economies over the decades.

By the 1980s, other Asian countries had begun to follow the same pattern. China, Thailand, Malaysia, and Indonesia all experienced real rates of growth that were very high contrasted with their earlier experience and with that of other countries in other regions. Thus, although Mexico experienced a crisis in 1994 (and Russia and Brazil crises in 1998 and

l999), the Asian “miracle” countries were widely regarded as immune from growth slowdowns, much less crises of the Mexican variety.

It should be noted that there had earlier been any number of “foreign exchange” or financial crises. In most instances, these had occurred when economic policies had sustained unrealistic (overvalued) exchange rates through the use of exchange controls and restrictions on capital flows, if not current account transactions. Those crises were normally precipitated by difficulties in domestic banking systems, in the case of financial crises (such as Sweden in l992) or by a country’s inability either to borrow further to finance its current account deficit (such as in Turkey in l980) or to restrict its imports further.

It was the “Asian crises” of l997 that shocked the world: seemingly unstoppable successful countries had apparently foundered. There was a relentless outflow of foreign exchange, and governments faced the possibility that they might be unable to honor their foreign obligations. Korea, for example, had experienced capital inflows of as much as l0 percent of GDP during the l960s and l970s, but had avoided the “debt crises” of other countries in the l980s both because of the rapid growth of exports and because the debt-GDP ratio and debt-export ratio actually fell during that same period. As a symptom of their success, the Asian economies were regarded as highly creditworthy, so that the shocks of 1997 were all the greater.

The proximate “causes” of the crises were capital outflows, and the crises were initially blamed on “speculators”, “hot money”, “contagion’, and the like. But further analysis showed that, although capital outflows were the “forcing” phenomenon that led to crisis, there were underlying factors that had come into play. While these factors differed from case to case, there were significant commonalities.

It is not the purpose here to review the panoply of lessons learned, nor to analyze the policy responses to the crises (about which there has been considerable controversy). Suffice it to say that there is widespread agreement that a fixed exchange rate regime in most cases removes a major shock absorber and can, in the absence of appropriate supporting policies, itself result in major difficulties. There are far fewer fixed exchange rate regimes in the world than there were in the mid-1990s. There is also a greatly heightened awareness of the need to examine debt sustainability, as well as current flows. And there is increased recognition of the importance of the need for consistency between domestic monetary and fiscal policy and the exchange rate regime. For all these reasons, there is certainly reduced risk of crisis. But, in addition, as the experience of the late l990s has been further analyzed, recognition of the necessity of financial sector development in the course of economic growth has increased.

The Role of the Financial Sector

We have long known about the importance of the financial sector in supporting an efficient allocation of resources and economic growth. But it has perhaps not been so well recognized that as economies develop, the financial system becomes increasingly important either as a facilitator of economic growth (if it is performing its functions and developing with the rest of the economy) or as an inhibitor (if it remains underdeveloped). When economic activity is at its most basic, carried out within a confined geographical area with much subsistence activity, a relatively small fraction of total economic output is traded, and hence the need for money and finance is limited. Reliance on family finance can serve as a sufficient source of funds for small and even larger businesses.

Moreover, in those circumstances, it may even be that credit rationing can do a fairly reasonable job of allocating credit: high real rates of return opportunities (such as in mining

or the manufacture of those few items consumed by poor households such as candles, matches, radios, and the like) may be relatively self-evident in economies with very simple structures. But as the variety of economic activities increases, not only in manufacturing, but also in agriculture (as rising incomes lead consumers to shift more of their consumption away from basic foodgrains) and services, ease of recognition of "best projects" becomes more difficult. Reliance on family finance soon starts to inhibit growth. More financial intermediation is needed if incremental resources are to be allocated efficiently, because of constraints otherwise imposed on the growth of more profitable activities, especially when small. Banking comes to play a greater role in increasing resources for high-return activities and reducing the amount wasted in lower return ones. But, with healthy growth, competition is important, and both risk and return considerations are important. Hence, the financial system must grow in its ability to allocate resources.

As the economy grows, and grows more complex, the financial sector needs to keep pace. Banks need to grow and become more sophisticated in their ability to assess prospects for risks and returns; and, in parallel, there needs to be the development of other financial sources of investment capital. Sustained and rapid growth needs to be underpinned by a broadening and deepening of the financial system, capable of serving the needs of all parts of the economy. Those economies that have sustained rapid growth over the long term have experienced enormous structural change, as they have shifted from being predominantly rural and agricultural to a more urban, manufacturing-and-service-based structure.

This was certainly the history of the industrialized countries. As they grew in the eighteenth, nineteenth and twentieth centuries, their financial systems grew in depth and breadth. In the 19th century, London achieved its status as the world's leading financial

center, because the financial sector had developed rapidly in order to serve the needs of British industry and British exporters. As it grew in order to support Britain's economic growth, it also became a major contributor to that growth – and, for that matter, to growth in other parts of the world as it exported capital and financial skills.

In the 20th century, New York played a similar role in relation to the American economy. As New York developed as a financial center to serve the needs of the dynamic and rapidly growing American economy, so it developed the skills and services that could themselves be exported.

And this process has continued. The growth in hedge funds in recent years is an example of this continuing development in financial markets. And as the financial sector in industrial countries has become more complex, it has posed fresh challenges for those charged with ensuring that the financial sector is sound and well-functioning.

Even 20 or 30 years ago, no one would have quarreled with anything I have said so far. Ronald McKinnon wrote of "financial repression" and its costs in terms of foregone growth in the 1970s, and most development economists included "credit rationing" among the policies and practices in developing countries that hampered their growth. But the financial crises of the 1990s brought home to everyone the importance of the financial system and its smooth functioning. What we had perhaps not fully appreciated was the extent to which the health and effectiveness of the financial sector was bound up with the performance of the economy as a whole. I shall illustrate the argument with an overview of the ways in which the failure of the financial system to develop pari passu with the rest of the economy contributed to the Korean crisis of 1997-1998.

Korea

It is hard to remember that what is today the world's 11th largest economy and one of the richest economies in Asia was, in the 1950s, one of the poorest in the world, and the third poorest in Asia. In the 1950s, many informed observers believed that the Korean economy could never be viable without sustained foreign aid transfers, as Korea had the highest density of population on the land (which was in any event very infertile), while the domestic savings rate had been zero, and investment had been almost entirely financed by foreign aid.

Yet the reforms of the late 1950s and early 1960s had a remarkable impact. Real GDP grew at an average annual rate above 10 percent for the entire decade starting in 1963. Real per capita income in 1995 was estimated to be close to 9 times what it had been in the early 1960s. The thrust of the reform program was to turn Korea into an open economy. In 1960, Korean exports (88 percent of which were primary commodities) were 3 percent of GDP, imports 13 percent. Already by 1970, exports had risen to 14 percent of GDP and by 19890 they were 33 percent. Between 1960 and 1969 (when world prices were fairly constant), dollar export earnings grew at an average annual rate of 41 percent.

The chaebol played a central role in this spectacular export performance, which was seen by all to be the major driver of growth. The chaebol were conglomerates, usually family-owned, that grew rapidly after the reforms, taking advantage of the (uniform) incentives offered for exporters. Government policies mandated that all exporters should have access to low-interest credit (as well as tax breaks). The real exchange rate had been depreciated to a realistic level – Korea had had multiple exchange rates, severe import licensing, and exchange controls in the 1950s in the context of the then-highest rate of inflation in the world. As companies grew rapidly, access to credit was vital, and this was allowed in proportion to export performance.

It is often forgotten, and it is important, that export incentives were uniform, available to any that increased exports But the chaebol were those successful firms that grew most rapidly and they did so, given the incentive structure, by increasing their exports rapidly. In the early years of Korean growth, the chaebol were national heroes, seen as spearheading the remarkably successful growth performance, itself understood as a result of the opening up of the economy. And, this is crucial: because the Korean economy had been so closed, there was probably very little resource misallocation in the early years from allocating credit on preferential terms almost exclusively to exporters. Indeed, despite the favorable terms, many chaebol borrowed beyond their allocated credit amount on the curb market, at much higher interest rates, suggesting that much of the implicit subsidy in their borrowing was intramarginal.

Over the first decade of rapid growth, the chaebol enjoyed real rates of return estimated to average 35 percent or more. But, over the next three decades, as high rates of growth of the overall economy continued, these rates of return fell, as indeed they should have. The real interest rate charged on those loans rose and the gap between the controlled rate and the market-clearing rate narrowed, but credit continued to be rationed.

In contrast to trade, which was liberalized at an early stage in the Korean reform process, the banking system continued to be tightly controlled.. Although the real interest rate charged was positive, credit rationing continued well beyond the initial years. Deregulation of interest rates only started in the late 1980s.

By the l980s, rates of return were estimated to be slightly lower for the chaebol than for Korean manufacturing firms as a whole. By the latter part of the decade, rates of return in Korea were, on average, only slightly above 4 percent; they fell to under 2 percent in the

early 1990s and were negative by 1997. By contrast, even after the Asian crisis and during the long period of slow growth in Japan, rates of return there were still about 2.3 percent.

Because of their rapid growth, the chaebol had continued to increase their share of output, and credit continued to be allocated to them. From the mid-180s, the largest 30 chaebol were growing around 20 percent annually, and the largest 5 at 30 percent. By the time of the crisis, their assets were many times higher than they had been in 1985 (14 times higher for the largest 30 and 19 times higher for the big 5), but their profits were growing much more slowly, if at all. By 1997, the largest 5 chaebol accounted for about 40 percent of manufacturing sector assets. But the close links between firms in a chaebol included investing in each other and guaranteeing bank debt for each other, and indeed, borrowing from banks owned by the same chaebol.

Worse yet, these firms were highly leveraged. In the manufacturing sector as a whole, debt was about 3.5 times equity in the mid-1990s, 2-3 times that in the United States. And chaebol were even more highly leveraged than Korean firms as a whole, with strong incentives to continue to rely on debt financing because of subsidized credit. It should be noted that the flip side of the increased attractiveness of debt financing was the failure of the equity market in Korea to grow as rapidly as it might have had chaebol had less inducement to borrow at subsidized interest rates.

Moreover, the position of the chaebol – both their importance and their highly leveraged state – had serious implications for the Korean economy as a whole. Sustaining rapid growth seemed to require a continuing flow of credit to them. But as rates of return declined, so maintaining the credit flow had lower and lower rates of return.

Although bank assets rose sharply in the five years prior to the crisis, net banking income had peaked in the early l990s and the rate of return on bank assets was falling continuously, as was the rate of return on equity. Nonperforming loans had not significantly increased prior to the crisis – although NPLs rose sharply after the crisis started – but in hindsight that appears to have been in significant part the result of "evergreening".

Conventional wisdom at the time of the crisis attributed the source of the trouble to the foreign currency exposure of the banking system. But this foreign borrowing had been undertaken in order to sustain rapid credit expansion at home. And much credit went to evergreening, and covering losses, rather than generating new income streams. The real source of Korea's problems was largely home-grown, as the quality of bank portfolios declined.

In a paper with Jungho Yoo, we described early 1997 Korea as a disaster waiting to happen. Because of the need to sustain lending to the chaebol, the banking system, and ultimately the economy, had become so vulnerable that something was bound to trigger a crisis.

Korea's painful experience brought home the importance of a well-regulated and transparent banking system – and the damage that can be inflicted on the economy as a whole by the absence of a healthy financial sector. Attention to balance sheet soundness, and any mismatches between the currency denomination of assets and liabilities, is essential.

But the events in Korea demonstrated something further: well-functioning financial markets become increasingly important as growth progresses. While credit rationing *may* be compatible with growth at early stages of development (or when severe imbalances are

obvious in highly distorted situations) a well-functioning financial system must grow with the economy as a whole if growth is to be sustainable.

In the Korean case, the vulnerabilities inherent in continued credit rationing were not sufficiently critically examined, in part because of the historically excellent performance of the economy as a whole in spite of it. But credit rationing resulted in excessive reliance on bank credit, the failure of efficient bond and equity markets to develop, and ultimately in an unsustainably leveraged situation. Crisis or stagnation were bound to occur, or in the worst case, the economy was bound to contract. In Korea's case, reforms were undertaken so that output had rebounded to precrisis levels within 18 months (a much shorter period than analysts at the time predicted) and growth rates have been solid since that time.

Lessons from the Korean Experience

It is difficult, if not impossible, to have an open current account with tight restrictions on capital movements. But a reasonably open capital account requires that the domestic financial system be fairly efficient – otherwise, distortions in domestic markets will be reflected in the capital account and elsewhere. When credit is rationed, the quality of bank portfolios declines, and the ability to assess risk, as well as the rewards for doing so, declines. When the return on new investments – financed largely by banks in the absence of development of well-functioning equity and bond markets – declines, so, too, must the overall growth rate.

But the real lesson is that the financial system must develop. It must surely include a banking system in which there is competition and risk and returns can be evaluated competently. But if the banking system is distorted, that will lead to distortions (or a failure

to develop) in the rest of the financial sector as well. The more sources of finance in a competitive framework, the better placed the financial sector is to play its role.

These conclusions have recently been reinforced by work done by Prasad, Rajan and Subramanian. In assessing the role of foreign capital inflows on growth, they found a distinct difference between industrial countries (where inflows on average spur growth after controls are introduced for the standard growth-determining variables) and low-income countries, where the evidence suggests a perverse link (and where there are net capital flows from poor countries to richer ones). They also note that this perverse link is not found for direct foreign investment.

Piecing the evidence together, they conclude that, given the lack of development of the financial system in poor countries, there is no mechanism by which domestic and foreign capital can be absorbed efficiently; hence there are capital outflows instead of inflows. They conclude that "..it seems to us that successful developing countries have limited absorptive capacity for foreign resources, whether it be because their financial markets are underdeveloped or because their economies are prone to overvaluation caused by rapid capital inflows." (P.xx)

Economies need well-developed banking systems once they have passed the early stages of development. Since they can get some distance without them, there was a tendency to neglect the importance of the banking system in the earlier development literature. But as they grow and their economies become more sophisticated, bond, equity, and other financial markets must grow as well. As firms grow in size, diversity and complexity, they need access to credit and to sources of finance other than short-term bank credit. The ability to raise

longer-term finance through equity or securities markets permits this to be achieved efficiently.

Policy Implications

For countries experiencing rapid growth, development of a healthy financial sector is critical. Hence, in many emerging markets and developing countries today, emphasis must be placed (among other things) on reforms that enable improved functioning of the financial system. At early stages of development, this entails strengthening the rights of borrowers and lenders, development of a credit rating system, lowering the costs of obtaining credit (not the interest rate), and streamlining means for settlement of disputes.

The World Bank has recently provided data on a number of these phenomena across countries. It has created a scale ranging from 1 to 10 (highest) to indicate the degree to which borrowers' and creditors' rights are protected. Industrial countries generally (but not always) receive high ratings, with the US and Australia for example receiving ratings of 10 and 9 respectively. By contrast, Argentina scores 3, Mexico 2, and some countries 1 and even 0.

Provision of credit ratings, normally through private credit bureaus, is also highly variable across countries. Again, industrial countries normally score well, with coverage of most of the economy, whereas Brazil has coverage of about half the population, and Costa Rica less than 5 percent. More than half of the 55 countries surveyed had no private credit bureau coverage at all.

The cost of creating collateral for loans also varies widely. World Bank numbers estimate that it is less than 0.1 percent of per capita income in the United States and the Untied Kingdom. By way of comparison, it is 8.1 percent of per capita income in Korea, 2.7

percent in Japan, 11.7 percent in India, 20.7 percent in Nigeria, and 62.2 percent of per capita income in Morocco.

The ability to enforce contracts also matters. In most industrial countries, the time to achieve legal enforcement is around 6 months (250 days in the Untied States, 75 days in France), while in developing countries it can be much more: 591 days in Bolivia, 425 in India, and 1,000 in Poland. Clearly, inability to enforce loan obligations can itself stymie financial development.

Policy reforms entailing increasing the efficiency of bankruptcy proceedings, reducing the cost of collateral, enforcing contracts, and improving other aspects of the financial nexus are clearly important. But so, too, is the development of an efficient (and implemented) regulatory framework, and competition within the banking system. How this is achieved can vary greatly from country to country, but there is a strong presumption that the development of arms-length lending, competition within the banking system, and arrangements that permit timely enforceability of contracts clearly matter.

In Korea, reforms in many of these dimensions were undertaken in response to the crisis, and, as already indicated, growth resumed quickly and has been sustained. In some other emerging markets, reforms are proceeding, although with varying degrees of rapidity. And, as some of the numbers just mentioned indicate, there are many countries where significant improvements will need to be made in order to enable the financial system even to begin to carry out its role.

Clearly, the financial sector is not THE key to development, any more than human capital or physical capital accumulation were. Equally, however, failure to develop the financial sector can put an enormous brake on growth prospects and, indeed, if the issue is

not addressed, can thwart development efforts. For countries where there is a strong commitment to growth, the lesson is clear: attention needs to be paid to financial sector issues as growth proceeds, unless it is preferred to wait for a crisis to force the necessary reforms.