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Growth, Development Policy, Job Creation and Poverty Reduction

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Abstract

Policies seeking to directly help the poor have an important role to play. But without sustained growth in per capita output and significant job creation, they will not succeed. Policies promoting growth have been suggested, most notably by avoiding pro-cyclical responses to macroeconomic shocks (especially from abroad), steering macroeconomic prices, such as exchange and interest rates, to support developmental objectives, pursuing industrial and trade policies involving increasing returns, promoting financial development, and making productive use of foreign aid. Ensuring national economies have sufficient policy space to achieve sustained growth and structural change should be the over-riding policy concern.

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Growth, Development Policy, Job Creation and Poverty Reduction[1]

Lance Taylor

Almost a decade into the twenty-first century, absolute poverty is still pervasive outside the industrialized world. Helping poor people in poor countries improve their levels of living is on the short list of key international policy goals. The air is full of ideas about how poverty should be analyzed and attacked. Although there have been some recent success stories, particularly in East Asia, the unhappy truth is that anti-poverty programs in developing countries have quite often failed or had limited success.[2]

The reason for this is that these programs did not enable poor economies to generate long-term growth of real per capita income. A useful rule of thumb is that developing and transition economies should sustain at least 2 per cent annual per capita real growth of gross domestic product or GDP. That would stop the gap separating their standards of living from the industrial world's from widening even further, and 3 per cent or more would gradually reduce it. A 2 per cent per capita growth rate can make a big dent in poverty by increasing average income by 22 per cent over 10 years and 49 per cent over 20. In addition, growth can only address poverty concerns if it generates new jobs to keep pace with a rising labour force.

Relatively few developing and transition economies have been able to mount steady growth at 2 per cent or higher for long time periods. The quarter century or so after the second oil and interest rate shocks of 1979 was particularly critical in this regard, as many developing countries started to face long-term stagnation or even regression. There was, after 2000 because of booming terms of trade from primary products and low interest rates, significant growth but with the economic crisis that began in rich countries in 2007 and spreaded worldwide, this interlude has probably ended.

The reasons why sustained growth has been difficult to attain lie with the linkages among economic *structure*, policy, and growth. The emphasis on "structure" is essential here, as the analysis to follow is deeply embedded in a "structuralist" tradition of development economics, which provides the best way to understand the problems that people in poor countries have to confront in trying to reshape their national economies.

Since the mid-1970s, but particularly the 1980s, and under the strong influence of the World Bank and the International Monetary Fund, there was a significant change in the overall framework for development policies, from the tradition of strong state intervention that had prevailed after the Second World War to what came to be called the "Washington consensus". This orthodox framework asserts that economic liberalization—that is, letting the market take over from the state—is the answer to speeding up growth in the developing world. Orthodoxy was followed, to a greater or lesser extent, in both developing and transition economies, and they generally experienced poor growth records.

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1 This analysis draws on Ocampo, Rada and Taylor (2009).

2 At times, in this paper, developing and transition economies are referred to separately, but generally, the terms "developing" countries or economies and "developing world" refer to both groups.

In contrast, structuralism argues that there is clearly something missing from mainstream analysis—*it omits structure and structural change*. This may sound paradoxical because the main orthodox slogan was "structural reform", the term frequently used instead of "economic liberalization", which is what it was meant to imply. The use of the term "structural" in these programs is entirely different from the older usage, followed herein and explained below.

Poverty is central to this distinction. The most widely publicized anti-poverty program today is the Millennium Development Goals (MDG) effort sponsored by the United Nations. It calls for roughly doubling foreign aid to the poorest economies over the next 10 years. The aims are exemplary. An incomplete list ranges from halving, by 2015, the levels of extreme poverty and hunger that developing countries had in 1990, to providing universal primary education, sharply reducing infant and maternal mortality, increasing access to water and sanitation, and ensuring environmental sustainability.

Almost everybody can accept these merit social goals, but there are two important caveats. First, there is a major question about whether foreign aid flows will increase from around $100 billion per year in 2007 to the levels required to meet the MDGs. This problem is compounded by the fact that measured aid flows include "debt relief" to the poorest countries, which is not really new aid, as well as technical assistance delivered by professionals from donor countries, which may be useful, but is very costly. Such outlays are not really funds available for the recipient countries to spend on achieving the MDGs.

Secondly, the emphasis on merit social goals hides the fact that the key to reducing poverty is growth of the purchasing power of the poor. International donations, by themselves, are unlikely to bring about sustained growth in the poorest economies. Growth, accompanied and supported by structural change, is what is needed. It makes sense to discuss briefly the reasons why before going on to outline how economic policy can be utilized in diverse structural circumstances to generate growth. Macroeconomics and finance are first addressed in a bit more detail, followed by discussions of economic structure and employment, and foreign aid. Policy alternatives are then presented.

Macroeconomics and External Shocks

Orthodox development economics places a great deal of emphasis on the supply side. For example, higher saving is supposed to transform itself into more investment and faster growth, instead of holding down aggregate demand and output or spilling over into a current account surplus. Higher levels of education are supposed to guarantee people higher incomes from better jobs, but the implicit assumption is that the jobs will be available in the first place. Very often, employment generation adequate to absorb a growing population in developing countries is not observed. When it is observed, labour productivity may be stagnant or falling, so real incomes do not rise. Why are these discouraging outcomes so common?

In reality, if there is a supply factor that plays a *central* role in developing countries, it is foreign exchange availability, rather than production capacity. An immediate implication is that external shocks, both positive and negative, crucially influence macroeconomic dynamics. Counter-cyclical macroeconomic policies are key to coping with massive external shocks, not only to smoothen the domestic impact of external demand fluctuations, but also to steer important macroeconomic prices—the exchange and interest rates, in particular—to levels that can further developmental objectives.

Avoiding exchange rate overvaluation during booms is crucial to support the structural transformation of the economies towards new export and import-competing sectors with higher technological content, and for export and production diversification in general. In turn, maintaining growth during externally-induced crises requires both avoiding high interest rates and managing the foreign exchange constraint (the "external gap") faced by developing countries during these periods. Stability in both exchange and interest rates is also fundamental to facilitate rapid capital accumulation.

Regrettably, pro-cyclical macroeconomic policies have become the rule, rather than the exception, in the developing world. Pro-cyclical policy responses multiply the impacts of external shocks. The net result has been exchange rate appreciation and inflationary pressures during booms and severe recessions or outright growth collapses during crises. Liberalization policies may have helped reduce inflationary pressures, but have clearly worsened pro-cyclical responses through capital account and financial deregulation and their general disregard for the developmental objectives of exchange rate management.

Structural conditions matter in this area in at least three different ways. First, the character of developing countries as "risky borrowers" in international financial markets generates pro-cyclical variations in the availability of external finance and in pro-cyclical interest rates that are very hard to manage for developing countries, particularly when the capital account is fully liberalized.[3] Second, with weak financial development, the tools available to manage boom-bust cycles are more limited. Third, some forms of trade specialization are prone to macroeconomic shocks. Specialization in natural resource-based exports is more cyclically vulnerable than in manufacturing, and that in 'mid-tech' manufactures (some of which have acquired commodity characteristics) is more cyclically prone than specialization in low or high-tech manufactures.

All these short-term factors can easily prevent an economy from achieving *sustained* output growth at a rate of 2 per cent per capita or higher, effectively derailing long-term poverty alleviation. Effective counter-cyclical policy, pursued with some degree of control of external capital movements, may be the only solution.

Financial Structures

In the discussion of poverty, microfinance is a highly salient topic. But what is usually omitted is any consideration of how the financial structure of the economy influences its available policy options and possibilities for sustained growth. These topics are taken up here.

Finance in any economy undergoes structural change. There is no strict progression of financial development and initial conditions matter. But, broadly speaking, new financial structures gradually evolve, in a process that can be seen as a sequence of stages. It is instructive to trace through four of them and consider, in particular, how different forms of finance constrain macroeconomic policy manoeuvre.

Stage I finance centres on the banking system. It lends to both government and the private sector and its liability, "money," is the main source of liquidity. Two standard policy models follow directly from such retarded financial development. Despite their widespread application, both are anachronistic, especially after an economy proceeds beyond Stage I.

3 With open capital markets, domestic interest rates are closely tied to the foreign rate plus a country-specific "spread". The spread tends to fall when the economy is growing and to rise when it is in a slump, rendering counter-cyclical monetary policy virtually impossible.

One model is the "financial programming" framework routinely utilized by the International Monetary Fund, especially in poorer regions of the world. It boils down to looking at the economy through "twin deficit" lenses. If the external deficit is to be reduced, the argument goes, the only way to do so is to cut the fiscal deficit, regardless of what the private sector does. In fact, private (*not* public) sector net borrowing tends to be closely linked with foreign borrowing. In the data for most economies, the twin deficits do not apply.[4]

The other model simply says that inflation is solely and uniquely caused by growth of the money supply. This particular version of monetarism has been discredited for decades in economies with relatively sophisticated financial structures, but still is relevant in Stage I—the hyperinflation after the mid 2000s in Zimbabwe is the most recent example.

Finally, in all financial stages, manias, panics and crashes (after Kindleberger and Aliber, 2005), a familiar scenario is based on government assets (with an asset price P_G) which have been privatized and sold through a dealer to the public.[5] If the dealer happens to have a captive bank at his disposal, he can lend money to himself and to cronies to bid up the share price leading to a capital gain (or on-going inflation) at rate π: the asset price rises to $(1 + \pi) P_G$. Other actors may then start borrowing from the captive and other banks to try to buy shares, setting off a boom that inevitably ends in a crash.

Premier examples were the Mississippi and South Sea crises early in the eighteenth century, in which John Law's Banque Générale in Paris and the Swordblade Bank in London issued the loans. With international complications discussed below, the Chilean crisis of 1982–83 followed the same pattern around companies privatized by Pinochet's Chicago Boys. These examples illustrate a recurring theme in financial instability: capital gains are financed by liquidity in the form of liabilities assumed by financial actors to buy the appreciating assets. Manifold possibilities along these lines emerge, even in economies with highly sophisticated financial structures—witness the 2007–09 crisis in rich countries all around the world! Output contraction and financial "deleveraging" always follow, with devastating effects on poverty reduction via economic growth.[6]

In Stage II finance, there is a market for government and/or central bank bonds. Keynesian ideas about liquidity preference come into play, with the interest rate mediating portfolio choice between more liquid money and less liquid bonds (with government and central bank bonds being more liquid than those of the corporate sector, which are subject to interest rate spreads associated with both liquidity and solvency risks).

Given this degree of portfolio choice, the central bank can, in principle, intervene via open market operations (that is, buying and selling bonds) to influence the interest rate—a clear gain in policy manoeuvrability over Stage I. A bond market also permits the government to raise finance for a development bank, an institution of considerable policy import, as discussed below.

4 See Ocampo, Rada and Taylor (2009) for the evidence.

5 The "assets" might be claims on hypothetical future revenue streams (the South Sea and Mississippi cases discussed below) or equity of former state enterprises (a standard case in late twentieth century developing country crises).

6 "Leverage" is the ratio of assets to net worth (or total assets minus debt). Paradoxically, when asset prices rise, the proportional change in the numerator is less than in the denominator. Leverage thereby decreases, providing an incentive to take on more debt to buy more assets in a financial upswing. Ultimately, asset prices peak and start to fall. Leverage becomes "too high", provoking fire sales of assets and plummeting prices as de-leveraging gets underway.

In Stage III, national economic actors are able to borrow abroad in hard currency. This may be seen as the typical stage in which middle income countries are placed today. Before the recent commodity price boom, sub-Saharan African countries had seen little development in their financial structures that would take them beyond Stage II or even Stage I, as they continued to be deprived of access to private external financing. In a growing group of somewhat more prosperous countries, however, the importance of bond markets, especially central bank and government bonds, has been on the rise over the years, and they have fared better in attracting external private finance, even if in an unstable way. These countries may be said to be firmly based on Stage III financing.

External borrowing obviously opens financial possibilities, but also creates potential problems. The presence of foreign liabilities in portfolios immediately exposes their holders to exchange rate risk due to currency misalignment or mismatch. If their assets and expected net revenues are denominated in domestic currency but their liabilities are denominated in foreign currency, then an increase in the exchange rate generates both capital and income losses. The higher rate cuts directly into net worth, and jacks up the cost of debt service. The threat to balance sheets is greater if (as has often been the case) there is a maturity mismatch involving short-term foreign liabilities and long-term domestic assets.

These dangers are especially grave for actors such as firms producing non-traded goods and the government itself insofar as their main sources of income are in local currency.[7] Although some assets of exporters (e.g., the real estate that they own and their deposits in the domestic financial system) may be denominated in local currency and subject to the same problems, they could be more than offset by the larger domestic value of their current and expected net income in foreign currency.

Money and credit expansion due to the accumulation of international reserves during phases of booming capital inflows has become a persistent problem in emerging market economies.[8] If there is a market in domestic bonds, the central bank can, in principle, "sterilize" the monetary effect of international reserve accumulation by selling its own or government paper in exchange for money in an open market operation, although at the risk of driving up interest rates, which may then bring in still more foreign capital.

In Stage I, the only options for sterilization are to reduce the public sector debt by running a budget surplus, or raising commercial bank reserve requirements to "wipe up" the domestic money generated by the additional international reserves. These options are the only ones available if there is no well developed domestic debt market. A long sequence of currency crises shows that such interventions may be of limited effectiveness.

Stage IV finance features the presence of stock markets, in the recent period, mostly the consequence of privatization of formerly public enterprises which account for the lion's share of equity on offer. Benefits include the possibility of initial public offerings of new shares which can be an incentive for entrepreneurship. As opposed to the practice in rich countries where share buybacks are prevalent, firms in semi-industrialized countries often raise funds by issuing new shares.

Risks of equity finance are, of course, also present. Variations on the Chilean speculative episode discussed above have occurred frequently over the past few decades.

7 A recent twist in Eastern Europe took the form of households obtaining mortgages in euros or Swiss francs, with disastrous results when the local currencies depreciated.

8 If the exchange rate e stays constant, the home country's net foreign assets can only change gradually over time via a surplus or deficit on current account. Hence, a jump in foreign lending must be met by an equal increase in reserves which can stimulate money and credit expansion through the usual channels.

Economic Structure and Employment

In the medium to long run, it is useful to analyze policy alternatives using a structuralist approach that goes back to Adam Smith. It was at the centre of development thinking from the 1940s to the 1960s, and has been recently reiterated by Reinert (2006), and formalized by Ros (2000) and Rada (2007). The latter combines Kaldor's (1978) idea that faster output growth in a "modern" sector stimulates productivity growth with the essential insight of Lewis' labour surplus model. The outcome is that the economy can be viewed as a combination of increasing returns (modern) sectors and more plodding constant or decreasing returns ("subsistence") activities. Dynamics among markets, forces of innovation, finance and productive sectors can produce virtuous circles of growth and development based on decreasing costs per unit output. Smith realized, but did not emphasize that the invisible hand may need assistance in promoting sustained growth. As Alexander Hamilton and Friedrich List pointed out explicitly years later, conscious action, the visible hand, of the policy maker is often required.

The goal is to stimulate the sectors with increasing returns by shifting resources from elsewhere in the economy. The now industrialized economies succeeded in this task. The question is how to design policies that will facilitate similar processes elsewhere. Historically, the state has played a crucial role.

Let us suppose there is an increase in productivity growth in the modern sector. It can either stimulate or slow employment growth. In the former case, faster modern sector productivity growth means that job creation must necessarily slow down. If there are constant returns to scale in the subsistence sector, the output growth rate will be reduced by an equal amount. However, under conditions of decreasing returns combined with underemployment or surplus labour, subsistence income growth will fall by less than employment growth, still reducing demand for modern sector goods and reducing the sector's initial jump in job growth.[9] When feedbacks between the sectors work themselves out, faster productivity growth in the modern sector will still be associated with job creation, and subsistence output per capita will rise. Faster productivity growth in subsistence activities can also lead to better overall performance.

Now consider the case in which faster modern sector productivity growth reduces employment, in a case of "jobless growth". The foregoing results reverse, and the economy can easily fall into a low level equilibrium trap dominated by subsistence activities.[10] A coordinated policy package may be needed to get modern sector growth underway. China's gradualist approach beginning in the late 1970s is an intriguing example. It began by supporting agricultural productivity growth through market manipulation to rig prices in favour of previously collectivized peasant producers. Joint ownership of land was retained with household operation of small and fragmented parcels. Mixed enterprises of various forms enabled mechanization and economies of scale. Producers responded strongly to the price incentives combined with institutional changes, which in effect amounted to land reform.

Subsequently, expansionary modern sector interventions combined with direct foreign investment to support export growth took centre stage. A low level trap was avoided, but distributive tensions are rising with modern sector incomes now growing much more rapidly than real earnings in the countryside.

9 The basic idea comes from Sen (1966). He assumed that the elasticity of subsistence output with respect to employment is zero. Constant returns imply an elasticity of one. In reality, the elasticity probably lies between these extremes.

10 Rada (2007) works through the dynamics of how an economy can be caught in a low level trap.

In another example, if the modern sector mostly produces traded goods and the subsistence sector produces non-tradables, then the model sheds light on the liberalization experiences spurred by the Washington Consensus. A de-industrialization trap can open.

Capital account deregulation was, in many cases, associated with real appreciation and domestic credit expansion. Together with trade liberalization, the stronger exchange rate boosted demand for imports and penalized exports (also hit by removal of subsidies in some cases). The impact was to reduce modern sector employment creation. Offsetting influences were the credit expansion and rising private net borrowing during upswings. But even taking these factors into account, on the whole, liberalization was not associated with a strong increase in demand for traded goods.

Traded goods firms were faced with a choice between cutting costs or going out of business. Boosting labour productivity was the most important way to keep production underway. On both counts there was job loss. Unskilled workers bore the brunt of labour force reduction in traded goods, and shifted into informality and a range of subsistence activities. Distributive dynamics were driven by institutional circumstances in partly segmented labour markets, with details differing country by country. In many cases, stable or rising unemployment and unresponsive wages caused overall income distribution to become more concentrated. In others, expanding informal activity generated income increases for some poor households as growth lost traction. Short-term income increases for a few did not offset the loss in long term income growth for the many.

The modern/traded goods sector in many developing economies across the world could have been supported by counter-cyclical policy, but this option was not aggressively pursued. Directed sectoral support policies could have been deployed, but were ruled out by the non-interventionist prejudices of the Washington consensus. Nevertheless, policies oriented toward supporting production are still on the table.

Foreign Aid

A well-known adage from Lao Tzu provides a concise description of two key effects of foreign aid: “Give a man a fish and you feed him for a day” means that external assistance can be a dole. But its true purpose is presumably to “teach a man (or a national economy) to fish and … feed him for a lifetime.” As pointed out above, a rule of thumb for successful “fishing” is that the economy sustains at least 2 per cent annual per capita output growth. Employment creation should keep pace with the growing population.

Beyond Lao Tzu’s distinction, foreign aid has other complications. It certainly has helped launch 2 per cent or faster per capita growth performances in diverse policy environments. The limited availability of hard currency is often the crucial bottleneck in a developing economy, holding down both supply and demand. If effective demand can increase because foreign exchange is available to pay for associated imports, it can stimulate private sector investment and innovation. At the same time, the imports can bring in essential goods and technologies to raise productive capacity. Here are examples:

The first, most successful aid efforts were the post-Second World War Marshall Plan in Europe and the parallel reconstruction program in Japan. They emphasized breaking forex bottlenecks (the “dollar shortage”) via coordinated public and private interventions—as opposed to the more recent obsession with market liberalization. It is worth recalling that the Americans who helped implement reconstruction were New Dealers at ease with an interventionist state.

In the 1960s and 1970s, illiberal and bureaucratically planned South Korea utilized capital inflows and US-guaranteed market access to create a formidable industrial base, beginning with textiles and going on to the world's biggest integrated steel plant, and beyond into chip manufacture, automobiles, and broadband internet coverage for over 90 per cent of the country. Korea's international economic situation was a consequence of Cold War politics, but its planners took full advantage of the opportunities they had available.

In the "lost decade" of the 1980s, Chile performed better than the rest of Latin America because it received ample foreign assistance from international aid agencies favouring its neo-liberal policy stance. Increasingly sophisticated natural resource-based exports supported economic expansion.

Several economies in sub-Saharan Africa now have respectable growth rates with support from Nordic and other donors who provided steady aid flows over decades for their own geopolitical reasons.

In all these countries, big shifts in economic structure were created by a combination of technocratic top-down policy and spontaneous innovation from the bottom up. Even in neo-liberal Chile, the government consistently supported expansion of mineral and agro-exports. Mainstream opinion opposed state intervention, a viewpoint ignored at the time of the Marshall Plan or South Korea's growth spurt.

Over the past two or three decades, many aid packages and economic "reform" programs informed by the Washington consensus did not generate linkages among demand growth, productivity, and employment. Per capita income levels did not rise, and as discussed above, workers displaced by trade liberalization vanished into informal and subsistence activities. Under these conditions, foreign aid become, at best, a dole and, at worst, a cesspool for corruption.[11]

Certainly, aid can have positive impacts at the micro level. A hand-out from abroad may cure smallpox or alleviate childhood malnutrition, but it is a hand-out notwithstanding. In recent decades, many poor economies have seen marked improvements in primary education (and health care as well), but have not been able to grow. Even if commendable and successful on their own terms, people-oriented technical fixes at the household level may not directly stimulate economy-wide expansion and enduring poverty alleviation. For aid to generate desirable outcomes in terms of growth, several challenges must be overcome:

At the micro level, human capital augmentation, just by itself, will not support steady growth unless high productivity enterprises get started.

Entrepreneurship is essential to this end, and should be rewarded.

But that will not happen spontaneously in a liberalized market environment. The state has to play a strong supportive role. Its available policy space has to expand so that countries can use instruments like sensible protection levels, targeted credit, and production subsidies to direct their limited resources toward productive ends. Scale economies are potentially available in many lines of endeavour—the task is to identify and support them. Linking fetters on developmental policies to disbursements of aid—standard practice for the World Bank and IMF—is completely counterproductive.

Many sub-Saharan African are now finding a new solution: Chinese aid. Based on its own record of strong growth, this donor has, of course, no objections to a developmental state. It focuses on getting

11 See Ocampo, Rada and Taylor (2009) for supporting evidence.

the economies to grow, based on exploiting the opportunities for raw material exports that China itself has generated. And it is not tied to the conditionality of the Bretton Woods institutions.

Policy Alternatives

The core idea is that there must be sustained growth in developing countries if poverty is to be reduced significantly. The policy agenda should promote changes in production and trade structures towards higher productivity sectors and utilization of idle resources, while at the same time, it advances the development of financial structures and the adoption of counter-cyclical macroeconomic interventions to manage both positive and negative external shocks. The "policy space" to adopt development and macroeconomic policies consistent with these objectives is crucial, as is overall policy coherence, particularly the coherence between short term macroeconomic management and developmental goals.

Patterns of transformation will not necessarily be the same everywhere. The level of development and, particularly, the degree of diversification of production and trade structures already achieved, the accumulated technological capabilities, the natural resource endowments and the size of the economies constitute a set of structural factors relevant for choices in the area of production sector policies. The extent of financial development and the degree of integration into global financial markets constitute another set that will determine macroeconomic policy alternatives. Policy must always be context-specific, as it must take into account the specific structural features of a country and the international environment at a point in time. The mainstream search for "one size fits all" solutions, that was so typical of the Washington consensus, is simply wrong. To have any chance for success, policy has to be tailored to each country's conditions and constraints.

Macroeconomic Policies

In the macroeconomic area, the two crucial issues are the need to enhance financial development and to design appropriate counter-cyclical macroeconomic policies. For poverty alleviation, other interventions may be crucial, for example, creating an adequate and progressive tax base to facilitate the adequate provision of social services and social protection as well as infrastructure development.

Financial development implies, first, the development of a sound banking sector and domestic bond markets. In the latter area, central bank and government bonds are commonly the starting point, but the final objective should be the development of deep corporate bond markets that facilitate investment financing. When long-term funds for investment financing are not available, public sector or state-sponsored development banks can play a very important role. They continue to be crucial when commercial banks and corporate bond markets provide financing with only limited maturity. Development banks and state intervention in general can also play a role in increasing access to finance by agents that have limited access to financial markets, including small firms and poor households, particularly in the latter case, for financing their major asset, housing.

Interestingly, state intervention is quite extensive in many of these areas, even under highly sophisticated financial markets (for example, in the United States). The development of bond markets, stock markets and other advanced forms of financing—such as sound securitized mortgages and sound derivative markets—may require promotion of specific institutional investors, which operate as "market makers". Development banks, insurance firms and pension funds play a role in these areas in many countries; specific state-sponsored agents do the same, even in industrial countries (for example, in the case of the US mortgage market).

As emphasized above, the possibility of financial instability is present at all stages of financial development. Financial development has a dual effect in this area. On the one hand, a denser institutional network of financial agents can be stabilizing and broaden the room for manoeuvre for counter-cyclical monetary policy. At the same time, however, new risks are created. They include: maturity mismatches between investment requirements and available finance, currency mismatches when external liabilities are used to finance the acquisition of domestic assets (particularly those producing non-tradable goods and services), excess leverage (the multiplication of financial liabilities relative to the capital base on which financial institutions operate), and even the sheer development of unsound financial instruments. These risks are present in all financial systems as reflected, for instance, in the importance of the latter two in the recent financial crisis in the industrial countries, including collateralized debt obligations based on sub-prime mortgages and credit default swaps backed by a very small capital bases. The first two sorts of risk are particularly important in developing countries, where variable mixes of maturity and currency mismatches are inherent to balance sheet structures.

Financial regulations must therefore become increasingly sophisticated as financial markets develop. Regulatory shortfalls are behind the high frequency of financial crises that have plagued the industrial and developing countries since the 1970s. Avoiding excessive leverage, and thus guaranteeing an adequate capital base in the financial system, as well as adequate provisions (or reserves) to cover expected losses, is the most basic issue. Almost equally important in developing countries is the management of maturity and currency mismatches. The simplest regulatory options are strict provisions or coverage for risk of balance sheets that have such mismatches, or quantitative limitations, or even outright prohibitions on foreign currency borrowing by domestic agents that produce non-tradable goods and services. And it should never be forgotten that over the centuries, newly invented, but unsound financial instruments have sparked many crises.

Finance is inherently pro-cyclical. Risks are accumulated during booms that are only evident at the end, when it is generally found that financial systems are seriously under-capitalized relative to the risks they have assumed. This recurring outcome lies behind a fundamental recommendation that prudential regulations should have a strong counter-cyclical component. One of the major problems behind current regulations is that they are actually pro-cyclical, including the pro-cyclical nature of credit ratings; the broad use of mark-to-market pricing, which fits transparency criteria but tends to transmit asset boom-bust cycles to portfolios; risk evaluation models that, due to their similar design, may actually make markets more volatile; and, more broadly, the tendency to build excessive leverage and open speculative positions during booms. The simple recommendations are to increase capital and/or provisions for loan losses during booms, and to avoid mark-to-market asset pricing from feeding into leverage—by (for example) imposing limits during booms on the values of assets that can be used as backing for credit or bond issues.

Pro-cyclical finance also calls forth counter-cyclical macroeconomic policies. The key problem here is that the pro-cyclical availability of external financing limits the space available for developing countries to adopt counter-cyclical macroeconomic policies. Fiscal policies can always play a role, for example through progressive income taxes that would operate as an automatic stabilizer by increasing government revenues at a faster pace than overall economic activity during booms or temporary tax hikes during these phases of the business cycle, the design of more effective permanent safety nets to support the vulnerable during crises, and fiscal stabilization funds to "store" temporary revenue upswings and rules that target "structural" fiscal balances—i.e., a deficit adjusted by pro-cyclical swings in tax revenues and the costs of safety nets used as automatic stabilizers during crises. In practice, however, the application of these principles is difficult, largely

because political pressures lead governments to spend during booms, particularly when they were forced to cut spending during the preceding crisis as part of orthodox stabilization packages. Thus, unfortunately, pro-cyclical fiscal policies are a common pattern in the developing world—a trend that must certainly be reversed.

An even more problematic feature is the tendency of "parity" interest rates (the costs of external financing plus expected depreciation, or minus expected appreciation, of the exchange rate) to fall during booms and increase during crises. If countries follow these trends, monetary policies will be pro-cyclical and exacerbate swings in output. But trying to increase interest rates during booms and reduce them during crises, going against trends in parity rates, may simply worsen exchange rate instability. Indeed, higher rates during booms increase incentives to bring in more capital, reinforcing appreciation trends. Lower rates in a crisis can generate incentives to take capital out, thus enhancing exchange rate depreciation and the risks of recession or even a long period of foreign exchange scarcity if the economy has failed to diversify during the boom.

This sort of interaction is the true dilemma of monetary and exchange rate policies in open economies. Inflation targeting, the ruling paradigm of monetary policy, can provide a framework for counter-cyclical policies when domestic demand is the sole determinant of domestic prices. But its counter-cyclical effect is unclear when exchange rates are a major determinant of domestic prices and, in any case, by failing to set exchange rate or balance of payments objectives, it may result in excessive exchange rate fluctuations. As a short run solution, exchange rate appreciation during booms will shift any excess demand towards the balance of payments. Although the inflation target may be met, the increase in the current account deficit and associated appreciation will become an element of vulnerability to a sudden stop in external financing. As a long term solution, this choice entirely ignores the developmental dimensions of the exchange rate i.e., the links between the exchange rate and the diversification of productive and trade structures.

Both from a short as well as a long-term perspective, macroeconomic policies in developing countries should therefore include an element of "exchange rate targeting" (Frenkel and Taylor, 2006). The massive interventions in foreign exchange markets in developing countries in recent years means that this is also a "revealed preference" of economic authorities in many, if not most countries.

The main contributions of macroeconomic policies to long term growth are moderate and relatively stable long-term real interest rates, and competitive and relatively stable real exchange rates. The first can facilitate investment financing. The second can contribute to structural change in the production and trade structures. The exchange rate becomes more important as the trade regime is liberalized because protection and export subsidies become less readily available to promote structural change. (This effect of trade liberalization has often been ignored.) It is possible for macroeconomic authorities to set, within some limits, *both* interest and exchange rates. But this means that a mix of capital account regulations and (possibly massive) interventions in the foreign exchange market is necessary. It is a rewarding exercise, as empirical evidence indicates that exchange rate competitiveness has positive effects on economic growth in developing countries—or, what is a similar result, that a strong current account has positive effects, not only on short term, but also on long-term growth.

Structural Transformation Policies

The major task of structural transformation policies is to facilitate a dynamic restructuring of production and trade towards activities with higher technological content. Countries that have industrialized have, in a broad sense, always pursued industrial policies, a statement that applies historically to the United States and Great Britain as well as to Japan and East Asian Tigers, among others. Industrial interventions have included trade policies (tariff and non-tariff protection, and export subsidies) and tax incentives, but also "pro-trust" policies to help create national champions and the active utilization of military spending for industrialist objectives. The more aggressive Asian policy in the post-Second World War period is, furthermore, consistent with Gerschenkron's (1962) insight that active state intervention tends to be more important for latecomers and, we could add, for late-latecomers.

The Washington consensus hit hard at these instruments and proposed that trade liberalization would be a less distortionary and more powerful instrument for development. This proved to be wrong. Trade liberalization has *not* been the instrument used by most successful developing economies, which have actively promoted the diversification of their production and exports towards sectors with higher technological content.

An appropriate integration into the world economy can, of course, be a powerful instrument of development policy. This concept has indeed always been at the heart of structuralist thinking. After all, according to the structuralists, the main objective of industrial policies was always to change the form of insertion of national economies into the global economic system—that is, to redefine the international division of labour, not to return to any form of "autarky" (a concept that is, in any case, irrelevant to understanding modern development). The real question then is what instruments developing countries can use to promote better insertion into the world economy today while supporting the incomes of the poor.

In this regard, trade instruments are less readily available than in the past, except for low income countries, and intellectual property provisions are more stringent. A major instrument that has *not* been limited by international agreements is development banking. In many successful experiences, state-supported banks have been a major instrument for financing new development activities, at times mixed with some element of state ownership. Some countries continue to use this mix, most notably China. In today's developing countries, government-backed long-term lending should be combined with the encouragement of corporate debt markets, an activity that itself can be supported by development banks as "market makers".

Several criteria have been discussed on how to design industrial policies today (see, for example, Amsden, 2001, and Ocampo, 2005). The objective should always be the promotion of patterns of structural change that lead to the accumulation of technological capabilities. On the basis of the ongoing debate, several criteria can be proposed.

The major one can be formulated in a straightforward way: policies should promote *innovative activities that generate positive domestic spillovers*.[12] The concept of "innovative activities" should be understood in a broad sense, to refer not only to new technologies, but also new markets, new industrial structures, or exploitation of previously underutilized natural resources. In today's export-oriented developing countries, export diversification, in either products or markets, should certainly be a major objective of these policies. In all cases, we should emphasize that "innovation" is what is "new" for the country or region where it takes

12 The key source for these ideas is Hirschman (1958).

place, regardless of whether this activity is fully developed elsewhere. Domestic spillovers—production linkages and technological externalities—are critical to justify government action, as benefits should go beyond the firm that undertakes the innovation.

Implicit in the emphasis on spillovers is that state intervention should aim at higher "value added", either in terms of technological content or at least of domestic content. Indeed, the latter follows from the fact that GDP is nothing else but value added. So, promoting pure assembly manufacturing or tourism with limited domestic contents is not desirable per se, unless that opens the space for further innovations down the line. It is perhaps paradoxical that the major forms of "industrial policy" in recent decades have been the promotion of free trade zones and the attraction of direct foreign investment through tax breaks or full tax exemptions—that is, activities that tend to reduce, rather than increase domestic linkages and value added while at the same time creating low income, dead end jobs.

In turn, the emphasis on "activities"—rather than "sectors"—raises a series of important questions. One is whether it is possible to separate an activity from the sector where it predominantly occurs. A particularly important case in this regard is whether it is possible to separate the process of promoting *production* from that of building *technological* capacities. The implicit assumption of old forms of industrial policy interventions was that the accumulation of technological capacities was closely tied to—in a sense, a by-product of—the development of particular sectors. Promoting increasingly sophisticated industrial sectors was, therefore, the way to both promote innovation and the accumulation of technological capacities. Technological advancement per se became a passive, rather than an active process.

In today's world, the issue of whether to promote activities, rather than sectors, turns out to be a pragmatic question, of whether it is possible to de-link innovative activity from the innovative sector. There is probably no single answer. But what is clear is that, whether a specific activity or sector is promoted, and whether or not the "innovation" directly lies in the area of production (e.g., conquering new markets or exploiting new resources), what is essential is that the final goal is the accumulation of technological capabilities.

The emphasis on activities carries another message: as opposed to what was usually accepted in the past, sectors other than manufacturing also offer opportunities for innovation. They include modern services, but also primary production, both in niche high value-added products (e.g., fresh fruits and vegetables) and also the technological upgrading of other natural resource-intensive activities.

These criteria apply at each stage of development, though in different ways, and opens possibilities of active policies for all countries. How to increase productivity in basic agricultural activities—often the principal source of incomes for the poor—should be the starting point of any development policy in low-income countries. How to move from primary goods to resource based and low skilled manufactures and services will be the challenge for low and lower-middle income countries, while middle income countries increasingly confront the choice of moving to manufactures and services with higher technological content. For those producing resource based goods or mid-tech manufactures subject to strong cyclical swings, an important element of the strategy must be how to diversify towards less cyclically vulnerable export sectors, and to accompany structural strategies with strong counter-cyclical macroeconomic policies.

Structural transformation strategies involve a public-private partnership of some kind. The need for such a partnership is associated with the information problems that different agents face: better information

for the private sector on production processes and specific markets, but better information for the State on the economy as a whole, on international conditions and processes and, of course, its capacity to enforce rules that benefit the whole of the private sector, rather than individual agents. The nature of the partnership will vary from country to country, depending on the characteristics of both private agents and the state. In all cases, however, it should be understood as a mutual learning process.

The incentives that are designed may be horizontal (that is, an incentive that applies to a certain activity in all sectors) or selective. A preference for horizontal incentives may be correct in some cases, but they may be inadequate to promote the special activities that generate the strongest spillovers and associated accumulation of technological capabilities. It is important to emphasize that, when fiscal resources are involved, how to allocate them is always a selective decision and it is better to adopt it on the basis of an explicit strategy.

It is incorrect, however, to insist that any selective strategy involves "picking winners"—the typical claim of critics of industrial policies. Any successful strategy is a learning process, even on what should be promoted and obviously involves the possibility of making wrong choices. This is true, by the way, of the strategies of individual firms in a free trade environment. The basic point is that the worst choice is to assume that the task of designing appropriate structural development strategies is impossible, and therefore take a passive stance. Furthermore, rather than "picking winners", the appropriate strategy may be characterized as "discovering" or even "making winners" in close interaction with production sector firms. This emphasis follows from our basic framework of analysis, according to which, productivity increases are, to a large extent, the result of production experience.

The decision making process was no doubt simpler during the import substitution era, as it was based on what was imported and the size of domestic markets. For some export-oriented economies, looking at the export structures of countries with higher incomes may be appropriate. But, as industrializing economies (now South Korea, Taiwan, and in some aspects, China) approach the world technological frontier, hands-on administrative guidance of the old style may not work. However, even if the bureaucracy cannot foresee "the next big thing" in new technology-oriented sectors, it can certainly help finance research and development, and provide long-term finance to firms and the infrastructure backup in these sectors—as with South Korea's 90+ per cent broadband internet coverage. None of these policy areas is restricted by international agreements, and these types of policies are actively practiced by states in industrialized countries today.

Incentives should be matched by performance standards—"reciprocal control mechanisms", to use Amsden's (2001) terminology. They should be granted on a temporary basis and dynamically adjusted to move forward in the structural transformation process. But any a priori definition of the duration of incentives may turn out to be artificial and could lead to the loss of resources invested without the policy objectives being met. A much better solution may be designing a learning process that would lead to decisions about whether to dismantle failed policies or extend successful policies until they bear their full fruits.

Finally, all of this requires investing in institution building. The destruction of institutional capacity in this area under the Washington consensus was devastating in most of the developing world. But nothing indicates that it cannot be rebuilt. Indeed, mainstream analysis usually carries a very contradictory view regarding institution building. It is usually assumed that creating good central banks or tax authorities is within the reach of developing countries, but that promotion of productive sector development is somehow impossible. There is no reason why. Successful countries have shown that it can be done.

International Environment

Although the discussion here has focused on domestic macroeconomic policies and structural development strategies, the international environment is critical, as clearly indicated by the clustering in time of successes and failures across a broad range of countries. So, designing better instruments for global macroeconomic policy management is essential for developing countries, as is adequate voice and participation in associated decision making.

And we should finally underscore, once again, that international rule making should leave enough "policy space" for developing countries to adopt strategies and policies to manage external shocks and promote their structural transformation. This is an area where there has been a clear regression in recent decades. A more equitable world is certainly not a world based on rules that make development more difficult.

Pro-Poor Policy Orientation

The main point of this paper is that serious poverty eradication is impossible without sustained growth in per capita income. Some countries have fared relatively well in maintaining economic growth; many more have not.

Growth does not occur without ongoing structural change. Policies that may promote growth have been suggested, most notably avoiding, insofar as possible, pro-cyclical responses to macroeconomic shocks (most importantly, shocks that impact on the economy from abroad), steering macroeconomic prices, such as the exchange and interest rates, to support developmental objectives, pursuing industrial and trade policies that support economic activities that can generate increasing returns, promoting financial development, and making productive use of foreign aid.

Of course, policies targeted directly at helping the poor (for example, by attempting to reach the Millennium Development Goals) have an important role to play. But unless there is sustained growth in per capita output along with significant job creation, they will not succeed. Returning to Lao Tzu, teaching national economies to "fish" successfully for sustained growth and structural change is the over-riding policy concern.

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