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**External Liberalization, Economic
Performance, and Distribution
in Latin America and Elsewhere**

Lance Taylor

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December 2000

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Development Economics Research
(UNU/WIDER)

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CONTENTS

LIST OF TABLES AND FIGURES	iv
ABSTRACT	v
I INTRODUCTION	1
II VIEWS ABOUT LIBERALIZATION	1
III THE APPROACH OF THE COUNTRY PAPERS	4
IV INITIAL SUMMARY OF RESULTS	5
V A MODEL OF LIBERALIZATION	5
VI EFFECTS OF LIBERALIZATION	9
6.1 Capital account liberalization	9
6.2 Current account liberalization	11
VII GRAPHICAL ILLUSTRATION OF THE EFFECTS OF LIBERALIZATION	12
7.1 Other reforms	14
VIII DECOMPOSITION TECHNIQUES	14
8.1 Effective demand	15
8.2 Employment decompositions	17
8.3 Labour productivity growth	18
8.4 Capital and labour productivity and real earnings	19
8.5 Structure of costs	19
IX SUMMARY OF LIBERALIZATION'S OUTCOMES	20
9.1 Growth and macro performance	20
9.2 Income inequality	21
9.3 Sources of effective demand	23
9.4 Productivity and employment growth	24
X POLICY ALTERNATIVES	25
REFERENCES	37

LIST OF TABLES AND FIGURES

Table 1	Growth, employment and inequality	28
Table 2	Aggregate demand decomposition	31
Table 3	Productivity and employment	34
Figure 1	Initial equilibrium positions in traded and non-traded goods markets and probable shifts after current and capital account liberalization.	8

ABSTRACT

As seen from the year 2001, economic policy in developing and post-socialist economies during the preceding 10-15 years had one dominating theme - external 'liberalization' or the drastic lowering or removal of long-standing barriers to almost all international transactions in markets for goods and services and movements of capital. This wave of deregulation was the central feature of 'globalization' for the non-industrialized world. This paper discusses this fundamental economic policy shift in nine transition and developing countries in Latin America and elsewhere, drawing upon country studies from research projects sponsored by the United Nations.

The results are sobering. At their best—and the best cases were infrequent—liberalization packages generated modest improvements in economic growth and distributional equity; at their worst they have been associated with increasing income inequality and slower growth, even in the presence of rising capital inflows.

The country studies suggest that the effects of liberalization on growth, employment, and income distribution emerge from a complex set of forces on both the supply and the demand sides of the economy. Redistribution of income and production across industries (typically from those producing traded to those producing non-traded goods) and groups within the labour force (typically from the unskilled toward the skilled) as well as adverse shifts in 'macro' prices such as the real wage, interest, and exchange rates are part and parcel of the process.

This degree of complexity and most of deregulation's unfavourable effects were not anticipated by its proponents. Only now are they beginning to be widely recognized. The obvious implication is that the liberalization strategy needs to be seriously rethought.

I INTRODUCTION

As seen from the year 2000, economic policy in developing and post-socialist economies during the preceding 10-15 years had one dominating theme. Packages aimed at liberalizing the balance of payments, on both current and capital accounts, showed up throughout Latin America, Eastern Europe, Asia, and even in parts of Africa. Together with large but highly volatile foreign capital movements (often but not always in connection with privatization of state enterprises), this wave of external deregulation was the central feature of 'globalization' for the non-industrialized world.

In two recent research projects, the implications of external liberalization have been investigated through the use of quantified narrative histories for a number of countries, based on a methodology developed by the present author to decompose and analyse changes over time in effective demand, productivity growth, employment, and the sectoral/functional income distribution. The studies appear in collections edited by Ganuza *et al.* (2001) and Taylor (2000). The former concentrates on countries in Latin America and the Caribbean, while the latter includes papers on Argentina, Colombia, Cuba, India, South Korea (hereafter simply 'Korea'), Mexico, Russia, Turkey, and Zimbabwe. After a summary of the results of the projects and possible interpretations, the next step taken here is to develop a model of the likely effects of liberalization. The decomposition methodologies are then presented, and used to check the outcomes that the model generates—there is substantial overlap between observed phenomena and its projections. This discussion leads naturally to policy alternatives and suggestions about the future course of the liberalization process.

II VIEWS ABOUT LIBERALIZATION

Liberalization arrived abruptly. Stabilization and structural adjustment efforts through the mid-1980s had concentrated on fiscal and monetary restraint and realignment of exchange rates. Then in the late 1980s and early 1990s came drastic reductions in trade restrictions and domestic and external financial liberalization, almost simultaneously in most countries. Complementary policies included deregulation of domestic financial markets, tax systems, and labour markets.

All these changes are very recent. It will take time before their full effects on growth, employment, income distribution, and poverty can be fully assessed. But external liberalization marks such a dramatic switch in development policy away from traditional regimes of widespread state controls and import-substituting industrialization that one would expect large consequences.

The old policy model had been criticized for failing to promote efficient and competitive industrial production, for creating insufficient employment, and for failing to reduce income inequality. Its rapid abolition raises a new set of fundamental questions. Will the liberalization of trade and capital flows help countries meet social goals such as reductions in inequality and poverty, better provision of health and education, and social security? Will a world system in which national economies are highly integrated in commodity and capital markets (in terms of both increased transactions flows and tendencies toward price equalization) attain these goals of its own accord? Can social policies be deployed to ease the task?

The main official justification for the reforms was stated in terms of visible increases in economic efficiency and output growth that they were supposed to bring. Governments and international institutions promoting them were less explicit about their distributional consequences. The predominant view is that liberalization is likely to lead to better economic performance, at least in the medium-to-long-run. Even if there are adverse transitional impacts, they can be cushioned by social policies, and in any case after some time they will be outweighed by more rapid income growth.

This conclusion is fundamentally based on supply-side arguments. The purpose of trade reform is to switch production from non-tradable goods and inefficient import-substitutes towards exportable goods in which poor countries should have comparative advantage. Presumed full employment of all resources (labour included) enables such a switch to be made painlessly. Opening the capital account is supposed to bring financial inflows that will stimulate investment and productivity growth. In a typical mainstream syllogism, Londoño and Székely (1998) postulate that equity is positively related to growth and investment. These in turn are asserted to be positively related to structural reforms, so the conclusion is that liberalization supports low-income groups.

A second position is more radical in that its proponents such as Sen (1999) argue that social policies *should* be deployed to help the poorest, on the implicit assumption that the forces determining the income distribution, the extent of

poverty, and social relationships are largely independent of liberalization, globalization, and market processes more generally.

Finally, others argue that while there may be supply-side benefits from trade and capital market reforms one should not overlook aggregate demand, its potentially unfavourable interactions with distribution, and the impact of capital inflows on relative prices. The import-substitution model relied on expansion of internal markets with rising real wages as part of the strategy. Under the new regime controlling wage costs has come to centre stage. So long as there is enough productivity growth and no substantial displacement of workers, wage restraint need not be a problem because output expansion could create space for real income growth. But if wage levels are seriously reduced and/or workers with high consumption propensities lose their jobs, contraction of domestic demand could cut labour income in sectors that produce for the local market. Income inequality could rise if displaced unskilled workers end up in informal service sector activities for which there is a declining demand.

Rising capital inflows following liberalization tend to lead to real exchange rate appreciation, offsetting liberalization's incentives for traded goods production and forcing greater reductions in real wage costs. Appreciation in turn may be linked to high real interest rates, which add to production costs and penalize capital formation. Higher rates may also draw in more external capital, setting off a high interest rate/strong exchange rate spiral. Via the banking system, capital inflows feed into international reserves and domestic credit expansion. On the positive side, more credit may stimulate aggregate spending through increased domestic investment. However, credit expansion can also trigger a consumption boom (with purchases heavily weighted toward imports) or a speculative asset price bubble (typically in equity and/or real estate). The demand expansion may prove to be short-lived if the consequent widening of the external balance is unsustainable or if capital flees the economy when the bubble begins to deflate. Lack of prudential financial regulation makes the latter outcome all the more likely.

The thrust of these observations is that the effects of balance of payments liberalization on growth, employment, and income distribution emerge from a complex set of forces involving both the supply and the demand sides of the economy. Income redistribution and major shifts in relative prices are endogenous to the process. Nor is social policy a panacea for rising inequality and distributional tensions. Only a few countries such as Korea in 1998-9 and Chile and Colombia through much of the 1990s took advantage of strong fiscal positions to introduce large-scale programs to offset some of liberalization's

adverse distributional effects. Elsewhere, they were simply allowed to cascade through the system.

The bottom line is that there can be no facile conclusions about liberalization, nor about how its consequences can be contained. To date, social costs in many countries have outweighed the benefits, and this situation may persist for an extended period of time.

III THE APPROACH OF THE COUNTRY PAPERS

The authors of the country studies in the two projects largely adhere to the third, 'structuralist' worldview mentioned above. Structuralism is not accepted in all circles. But the strength of the papers is that their shared methodological stance eases the task of cross-country comparisons and points to coherent policy conclusions. Their analyses in depth are able to support generalizations about likely outcomes of the globalization/liberalization policy mix in diverse national circumstances.

How did the authors separate effects of specific policy changes from other factors, such as external shocks and other policy initiatives? They addressed this standard problem in economic analysis with a mixture of the following approaches:

- Well-informed country 'narratives' discussing policy changes and observed outcomes in a 'before-and-after' approach. The country stories started with a basic set of questions and hypotheses and a simple analytical framework suggesting possible channels of causation as outlined below. Authors subdivided their period of analysis into 'episodes' with relatively homogeneous policy packages and economic circumstances. They could then trace the effects of liberalization from one episode through another.
- Still within the realm of 'before and after', the decomposition analyses of aggregate demand, the factoral income distribution, employment, and productivity growth mentioned above were applied wherever data availability made them possible. They give essential comparative information on changes in output, employment, and inequality that actually took place.
- Counterfactual policy simulations ('with and without') were incorporated in some case studies, based on country-specific models.

IV INITIAL SUMMARY OF RESULTS

An immediate conclusion is that the effects of globalization and liberalization have not been uniformly favourable. In a classification that is overly simplistic but still suggestive, changes in growth rates and the primary income distribution for the countries included in the studies can be summarized in the following fashion:

Effect on growth:	Distributional impacts		
	Favourable	Neutral	Unfavourable
Positive	Chile (post-1990)	Peru Uruguay	Argentina (until 1997-8) Chile (until 1990) Dominican Republic El Salvador Mexico (post-1995)
Neutral	Costa Rica	Brazil Cuba Turkey	India Korea Mexico (until 1995)
Negative		Colombia	Argentina (post-1997-8) Jamaica Paraguay Russia Zimbabwe

The general impression given by the table is a tilt toward the southeast—slower growth and deterioration in the primary income distribution. Just two countries had a clear distributional improvement, and only Chile after 1990 managed to combine high growth with decreasing inequality (in contrast to increasing inequality over the preceding liberal 15 years). Stable or more rapid growth on a sustained basis was observed in a few small, open economies that benefited from capital inflows and a somewhat illiberal policy orientation discussed below. Two-thirds of the countries had rising inequality, and the five toward the extreme southeast (with Argentina late in the decade as a possible exception) to a greater or lesser extent were 'disasters'.

V A MODEL OF LIBERALIZATION

Along with the aggregate outcomes just summarized, liberalization had strong differential effects on prices and quantities in different sectors. For many but

not all countries, an appropriate disaggregation of the non-financial, price/quantity side of the economy focuses on traded and non-traded goods. The key relative price is the real exchange rate or ratio of traded to non-traded goods price indexes. In more populous, less intrinsically open economies one also has to consider other price ratios such as the agricultural terms of trade (India, Turkey) or the relative price of energy products (Russia). In sub-Saharan African countries such as Zimbabwe as well as in primary product exporters in Latin America and the Caribbean, the terms of trade between an urban-industrial and rural-agricultural sector come to the fore. In all cases, a mixture of price and quantity adjustments to liberalization is evident.

Since it is broadly applicable, the traded/non-traded separation is explored in the discussion to follow. Direct effects of removing barriers to trade and capital movements show up first in the traded (or tradable) goods sector but spillovers in both directions with non-traded goods have been immediate and substantial. Amadeo and Pero (2000) and Ros (1999) point out the major connections in similar fashions.

The framework is a 'fix-price/flex-price' model à la Hicks (1965) and many others. Traded goods are assumed to be produced under imperfect competition. The simplest model involves a discriminating monopolist manufacturing goods that can both be exported and sold at home, as in Ocampo and Taylor (1998). Households at home buy both domestically made and imported consumer goods. Prior to liberalization, firms have established mark-up rates over variable costs in both their markets—the levels will depend on the relevant elasticities. Variable cost is determined by the market prices and productivity levels of unskilled labour and intermediate imports; skilled labour and physical capital are fixed factors in the short-run. The traded goods price level P_t follows from the domestic mark-up over variable cost.

With stable mark-up rates, traded goods comprise a Hicksian 'fix-price' sector, with a level of output x_t determined by effective demand. The level of production of non-traded goods is also determined by demand, but the sector may well have decreasing returns to unskilled labour in the short-run. Higher production x_n is made possible by greater unskilled employment (or labour demand) L_n^d . However, cost-minimizing producers will hire extra workers only at a lower real product wage w/P_n , where w is the unskilled nominal wage (fixed in the short-run but subject to adjustment over time as discussed below) and P_n is the price of non-traded goods. In other words, a higher price-wage ratio P_n/w is associated with greater non-traded goods production and employment, and (if there are decreasing returns) reduced labour productivity.

If P_n/w is free to vary, then non-traded goods aggregate into a 'flex-price' sector. With stable mark-up rates in the traded goods sector, the inter-sectoral price ratio P_t/P_n will fall as P_n/w rises, i.e. a rising price of non-traded goods is associated with real appreciation as measured by the ratio of traded to non-traded goods price indexes (a commonly used proxy is the ratio of wholesale to retail price levels).

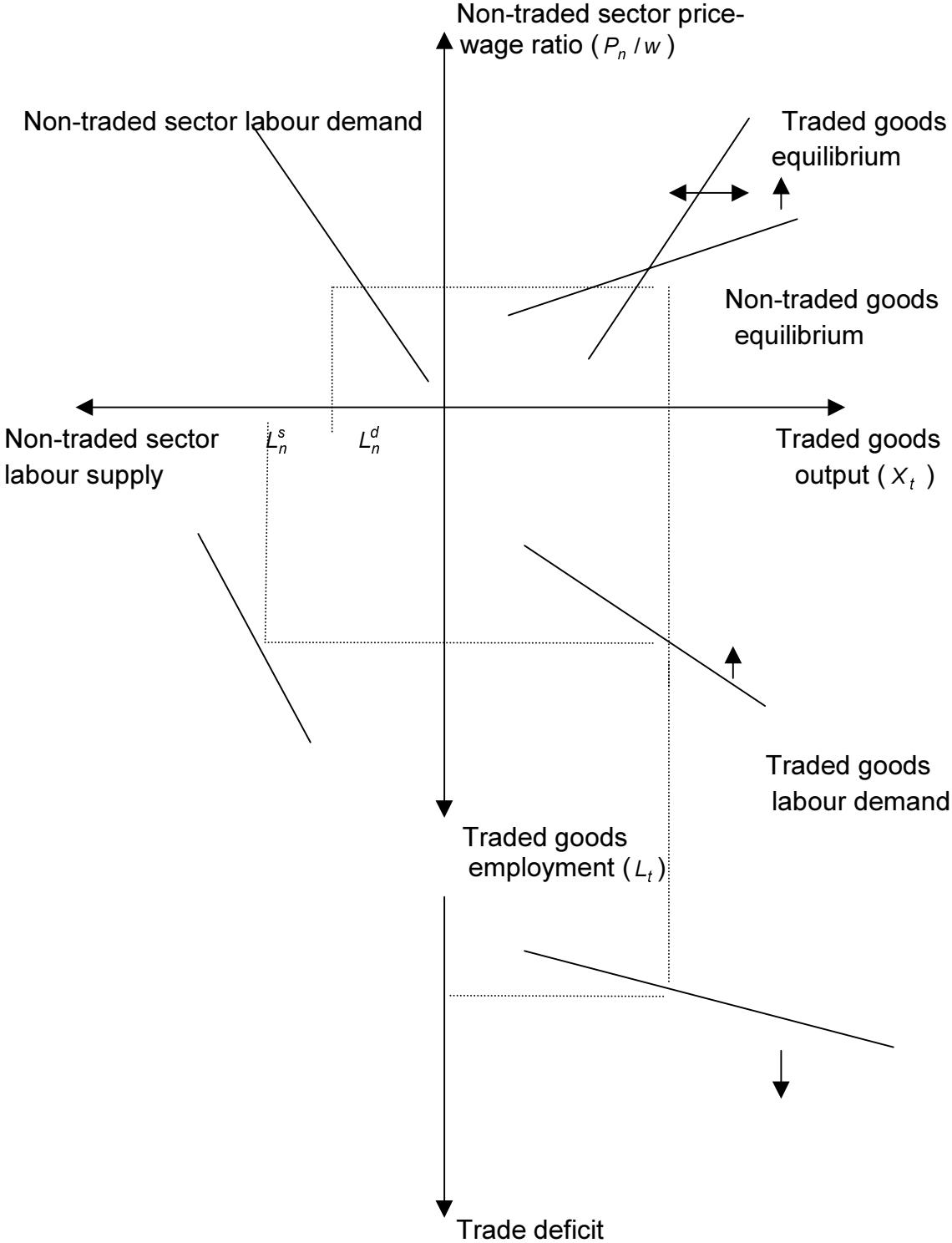
In a number of countries, an important component of the non-traded sector comprises the finance, insurance, and real estate (or FIRE) sub-sectors. As argued below, both the national interest rate i and the level of financial activity have tended to increase with liberalization—higher values of i and P_n/w go hand-in-hand, with distributional consequences to be discussed below.

Figure 1 gives a graphical presentation of the model.¹ The key quadrant lies in the extreme northeast. It shows how prices and output in the two sectors are determined. Along the schedule for 'Non-traded goods equilibrium', a higher traded goods output level x_t is assumed to generate additional demand for non-traded goods. As it is met by an increase in supply, the non-traded price-wage ratio P_n/w will rise. In the market for traded goods, depending on income effects a higher level of P_n/w can be associated with either higher or lower demand. The 'Traded goods equilibrium' schedule illustrates the former case—demand for x_t is stimulated by an increase in P_n/w . As drawn in the Figure, the short-run macro equilibrium defined by the intersection of the two curves is stable.

This equilibrium helps determine the status of several markets in the economy. For example, unskilled labour demand in the non-traded sector (L_n^d) is determined in the northwest quadrant. Employment in the traded goods sector is shown in the second quadrant from the top on the right. A lower employment

¹ See Taylor (1991) for an algebraic treatment of linkages like those described in the text in models closely related to the one illustrated in Figure 1.

FIGURE 1
 INITIAL EQUILIBRIUM POSITIONS IN TRADED AND NON-TRADED GOODS
 MARKETS AND PROBABLE SHIFTS AFTER CURRENT AND CAPITAL
 ACCOUNT LIBERALIZATION.



level in traded goods liberates labour that can be used in the other sector, as shown in the second quadrant from the top on the left. As the figure is drawn, labour supply L_n^s exceeds demand L_n^d in the non-traded sector, i.e. there is open or disguised unemployment as measured by the difference $(L_n^s - L_n^d)$. Finally, in the extreme southeast quadrant, bigger trade deficits are associated with higher levels of X_t and P_n/w .

VI EFFECTS OF LIBERALIZATION

As indicated above, in many developing economies both current and capital accounts of the balance of payments were liberalized nearly simultaneously in the late 1980s or early 1990s. Given this history, one has to consider the two policy shifts together. However, for analytical clarity it is useful to dissect them one at a time. In addition, effects of other reforms have to be considered as well, in particular domestic financial, tax, and labour market deregulation. We begin with the capital account, followed by the current account, to end with some comments regarding the other sets of reforms.

6.1 Capital account liberalization

Countries liberalized their capital accounts for several apparent reasons—to accommodate to external political pressures (Korea and many others), to find sources of finance for growing fiscal deficits (Turkey, Russia), or to bring in foreign exchange to finance the imports needed to hold down prices of traded goods in exchange rate-based inflation stabilization programs (Argentina, Brazil, Mexico).

Whatever the rationale, when they removed restrictions on capital movements, most countries received a surge of inflows from abroad. They came in subject to the accounting restriction that an economy's *net* foreign asset position (total holdings of external assets minus total external liabilities) can only change gradually over time through a deficit or surplus on the current account. Hence, when external liabilities increased as foreigners acquired securities issued by national governments or firms, external assets had to jump up as well. The new assets typically showed up on the balance sheets of financial institutions, including larger international reserves of the central bank. Unless the bank made a concerted effort to 'sterilize' the inflows (selling government bonds from its portfolio to 'mop up liquidity', for example), they set off a domestic credit boom. In poorly regulated financial systems, there was a high risk of a classic mania-panic-crash sequence along Kindleberger (1996) lines—the

famous crises in Latin America's Southern Cone around 1980 were only the first of many such disasters.

When the credit expansion was allowed to work itself through, interest rates could be low. However, other factors entered to push both levels of and the spread between borrowing and lending rates upward. One source of widening spreads is related to asset price booms in housing and stock markets, which forced rates to rise on interest-bearing securities such as government debt. Another source playing a role at times originated from central banks trying to sterilize capital inflows, and so pushing up rates as well. Finally, in non-competitive financial markets, local institutions often found it easy to raise spreads. High local returns pulled more capital inflows, worsening the overall disequilibrium.

Unsurprisingly, exchange rate movements complicated the story. In many countries, the exchange rate was used as a 'nominal anchor' in anti-inflation programs. Its nominal level was devalued at a rate less than the rate of inflation, leading to real appreciation. In several cases, the effect was rapid, with traded goods variable costs in dollar terms jumping upward immediately after the rate was frozen.

The same outcome also showed up via another channel. As countries removed capital controls and adopted 'floating' rates, they lost a degree of freedom in policy formulation. From standard macroeconomic theory we know that in a closed economy the market for bonds will be in equilibrium if the money market clears as well. When proper accounting restrictions (including a fixed level of net foreign assets in the short-run) are imposed on portfolio choice in an open economy, this theorem continues to apply (Taylor 1999). That is, an open economy has just one independent 'asset market' relationship, say an excess supply function for bonds of the form

$$B - B^d[i, i^*, (\varepsilon / e)] = 0$$

In this equation, B and B^d are bond supply and demand respectively. The latter depends positively on the domestic interest rate i , and negatively on the foreign rate i^* and on expected depreciation ε as normalized by the current spot rate e .² Total bond supply B will change slowly over time as new paper is issued to cover corporate and (especially) fiscal deficits.

² Scaling the expected change in the exchange rate by its current level puts the quantity ε / e —the expected rate of return from capital gains on foreign securities—on a comparable footing with the two interest rates.

For given expectations, the formula suggests that the interest rate and spot exchange rate will be related inversely. If, for the reasons mentioned above, the domestic rate i tended to rise, then the exchange rate would appreciate or fall. Or, the other way round, if the exchange rate strengthened over time, then interest rates would be pushed upward. This tendency would be amplified if real appreciation stimulated aggregate demand in the short-run—the other side of the coin of the well-known possibility that devaluation can be contractionary in developing economies (Krugman and Taylor 1978). Abandoning capital controls made the exchange rate/interest rate trade-off far more difficult to manage. Some countries did succeed in keeping their exchange rates relatively weak, but they were in a minority.

Summarizing, capital account liberalization combined with a boom in external inflows could easily provoke 'excessive' credit expansion. Paradoxically, the credit boom could be associated with relatively high interest rates and a strong local currency. These were not the most secure foundations for liberalization of the current account, the topic we take up next.

6.2 Current account liberalization

Current account deregulation basically took the form of transformation of import quota restrictions (where they were important) to tariffs, and then consolidation of tariff rates into a fairly narrow band, e.g. between zero and 20 per cent. With a few exceptions, export subsidies were also removed. There were visible effects on the level and composition of effective demand, and on patterns of employment and labour productivity.

Demand composition typically shifted in the direction of imports, especially when there was real exchange appreciation. In many cases, national savings rates also declined. This shift can partly be attributed to an increased supply of imports at low prices (increasing household spending, aided by credit expansion following financial liberalization), and partly to a profit squeeze (falling retained earnings) in industries producing traded goods. The fall in private savings sometimes was partially offset by rising government savings where fiscal policy became more restrictive. Many countries showed 'stop-go' cycles in government tax and spending behaviour.

Especially when it went together with real appreciation, current account liberalization pushed traded goods producers toward workplace reorganization (including greater reliance on foreign outsourcing) and down-sizing. If, as assumed above, unskilled labour is an important component of variable cost, then such workers would bear the brunt of such adjustments via job losses. In

other words, traded goods enterprises that stayed in operation had to cut costs by generating labour productivity growth. Depending on demand conditions, their total employment levels could easily fall.

The upshot of these effects often took the form of increased inequality between groups of workers, in particular between the skilled and unskilled. This outcome is at odds with widely discussed predictions of the Stolper-Samuelson (1941) theorem, according to which trade liberalization should lead to an increase in the remuneration of the relatively abundant production factor in low and middle income countries (unskilled labour) with respect to the scarce factor (capital or skilled labour). Of course, besides considering exchange rate and capital flow effects on remunerations, the model just presented departs from the standard Heckscher-Ohlin trade theory framework underlying Stolper-Samuelson by working with more than two production factors and allowing for open unemployment, factor immobility, and product market imperfections. These considerations along with changes in the sectoral composition of output, as emphasized in Figure 1, are important factors in determining the distributive effects of trade liberalization (Wood 1997). With liberalization stimulating productivity increases leading to a reduction of labour demand from modern, traded-goods production, primary income differentials widened between workers in such sectors and those employed in non-traded, informal activities (e.g. informal services) and the unemployed.

VII GRAPHICAL ILLUSTRATION OF THE EFFECTS OF LIBERALIZATION

It is easy to trace through the implications of these changes in Figure 1, beginning with the Traded goods equilibrium schedule in the northeast quadrant. The sector was subject to several conflicting forces:

- By switching demand toward imports, current account liberalization tended to reduce output x_t . This demand loss was strengthened by real appreciation and weakened or even reversed by devaluation. Removal of export subsidies hurt manufacturing and raw materials sectors in some cases.
- Domestic credit expansion and a falling saving rate stimulated demand for both sectors, although high interest rates may have held back spending on luxury manufactured items such as consumer durable and cars (in countries where they were produced). Income generation via FIRE activity helped stimulate the non-traded sector.

The outcome is that the shift in the Traded goods equilibrium schedule was ambiguous, as shown by the double-headed arrow in the diagram. The contractionary forces just mentioned did not impinge directly on non-traded goods; as shown, the corresponding market equilibrium schedule shifted upward. The likely results after both schedules adjusted were a higher non-traded price-wage ratio P_n/w , a fall in the intersectoral terms-of-trade P_t/P_n , and an ambiguous change in x_t . In some cases (notably Cuba, Russia, and Zimbabwe), the increase in the 'flex-price' P_n was associated with an inflationary process shifting the income distribution away from wages and toward public revenues or profits. The outcome was a reduction in effective demand through 'forced saving' by wage-earners with high propensities to consume, as analysed by Keynes and contemporaries in the 1920s and Kaldor after World War II.³

Turning to employment and productivity changes, new jobs were typically created in the non-traded sector, i.e. L_n^d went up along the demand schedule in the northwest quadrant. With overall decreasing returns in the sector, its real wage w/P_n and labour productivity level x_n/L_n^d could be expected to fall.

In the traded goods sector, higher labour productivity meant that the labour demand schedule in the middle quadrant on the right moved toward the origin. Regardless of what happened to their overall level of activity, traded goods producers generated fewer jobs per unit of output. Reading through the lower quadrant on the left, L_n^s or unskilled labour supply in non-traded goods tended to rise. The effect on overall unemployment ($L_n^s - L_n^d$) was unclear. Wage dynamics appeared to be 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 the overall income distribution to become more concentrated. The differential between skilled and unskilled wage rates tended to rise.

The final curve that shifted was the one setting the trade deficit in the extreme southeast quadrant. Higher import demand and (typically) lagging exports meant that it moved away from the origin—for a given output level, the deficit went up. The corresponding increase in 'required' capital inflows fed into the shifts in the capital account discussed above.

³ See Taylor (1991) for references and further discussion.

7.1 Other reforms

When assessing the effects hypothesized above in real country contexts, one has to take account of other measures that were implemented simultaneously in many places and which compounded the effects discussed above. We briefly mention three other major areas of liberalization.

Domestic financial sector deregulation: the effects of capital account liberalization have to be understood in conjunction with the domestic financial sector reforms that also took place in many countries before or around 1990. The lifting of interest-rate ceilings, lowering of reserve requirements, and easing of entry for new banks and other financial institutions were conducive to private credit expansion fuelled by foreign capital inflows. With inadequate bank regulation and supervision in most countries, these changes in regulatory policy exacerbated the risk of banking crises along the lines described above (Vos 1995).

Labour market liberalization: typically, only small changes have occurred in this area. However, distributional outcomes can be strongly influenced by the degree of wage rigidity and labour market segmentation. In most cases institutional wage setting in modern sector firms continues to prevail (as assumed above), as well as regulations stipulating high severance payments in case of dismissal of employees. Strongly segmented labour markets are still a main characteristic in many countries. The bargaining power of organized labour may well have declined, reducing the political space for real wage adjustments.

Tax reforms: broadly speaking, countries moved towards taxation of consumption through valued added taxes and away from direct taxation, roughly a shift away from taxing the wealthy and toward lower and middle income groups. Substantial lowering of marginal rates on income and corporate taxes has been common.

VIII DECOMPOSITION TECHNIQUES

To trace through the sorts of changes described by the model in detail, the first step is to examine how major economic aggregates shift over time. To this end, the country papers deploy several simple time series decomposition techniques. The essentials are outlined in this section, beginning with effective demand and going on to employment, productivity growth, and the functional income distribution.

8.1 Effective demand

Over the liberalization period, there have been substantial changes in demand-side parameters such as import coefficients and savings rates along with jumps in flows such as annual exports, investment, etc. It is illuminating to look at how output has responded to these shifts, using a simple decomposition of demand 'injections' (investment, government spending, exports) versus 'leakages' (saving, taxes, imports). The key point is that in macroeconomic equilibrium, totals of injections and leakages must be equal. Broadly following Godley (1999) this fact can be used to set up a decomposition methodology for effective demand.

At the one-sector level, aggregate supply (X) can be defined as the sum of private incomes (Y_p), net taxes (T) and imports (M):

$$(1) \quad X = Y_p + T + M$$

The aggregate supply and demand balance can be written as:

$$(2) \quad X = C_p + I_p + G + E$$

i.e., the sum of private consumption, private investment, government spending and exports. Leakage parameters can be defined relative to aggregate output, yielding the private savings rate as $s_p = (Y_p - C)/X$; the import propensity as $m = M/X$ and the tax rate as $t = T/X$. From this one gets a typical Keynesian income multiplier function:

$$(3) \quad X = \frac{1}{s_p + t + m} (I_p + G + E)$$

which can also be written as:

$$(4) \quad X = \frac{s_p}{(s_p + t + m)} \cdot \frac{I_p}{s_p} + \frac{t}{(s_p + t + m)} \cdot \frac{G}{t} + \frac{m}{(s_p + t + m)} \cdot \frac{E}{m}$$

in which I_p/s_p , G/t and E/m can be interpreted as the direct 'own' multiplier effects (or 'stances') on output of private investment, government spending, and export injections with their overall impact scaled by the corresponding 'leakages' (respectively, savings, tax, and import propensities).

The country papers use equation (4) in several ways. The simplest is a diagram of stances and total supply over time. In Mexico before 1994, for example,

I_p / s_p was substantially higher than X , as the private sector pumped demand into the system, while $(E/m) < X$ meant that high import levels were cutting into demand. The roles of the private and foreign sectors reversed sharply after the devaluation of 1994-5. Another representation involves the levels of $(I_p - s_p X)$, $(G - tX)$, and $(E - mX)$ which from (4) must sum to zero. Both such diagrams are helpful in identifying expansionary and contractionary factors in effective demand. Several papers apply discrete time 'first differencing' techniques to (4) along the lines presented below. These show the contributions of shifting weights vs. shifting multiplier impacts in determining X .

From the above equation system one can also derive the economy's real financial balance as:

$$(5) \quad \Delta P + \Delta Z + \Delta A = (I_p - s_p X) + (G - tX) + (E - mX) = 0$$

where ΔP , ΔZ , and ΔA stand respectively for the net change in financial claims against the private sector, in government debt, and in foreign assets. In continuous time, we have $dP/dt = I_p - s_p X$, $dZ/dt = G - tX$, and $dA/dt = E - mX$.

A couple of points can be made here. First, claims against an institutional entity (the private sector, government, or rest of the world) are growing when its stance with respect to X exceeds X itself. So when $E < mX$, net foreign assets of the home economy are declining, while $G > tX$ means that its government is running up debt. A contractionary stance of the rest of the world requires some other sector to be increasing liabilities or lowering assets, e.g. the public sector when $G > tX$. Because it is true that $dP/dt + dZ/dt + dA/dt = 0$, such offsetting effects are unavoidable.

Second, stock/flow disequilibrium problems threaten when ratios such as P/X , Z/X , or $-A/X$ (or P/Y_p , Z/tX , or $-A/E$) become 'too large'. Then the component expressions in (1) and the accumulation flows in (2) have to shift to bring the system back toward financial 'stock-flow' or 'stock-stock' equilibrium. Such adjustments can be quite painful.

Costs associated with the accumulation of net lending over time may imply important income redistribution effects between private and public domestic agents and the rest of the world. When taking such asset-related income transfers into account, we get the more familiar macroeconomic balances

linked to expenditures and savings out of the disposable income of each institution, rather than from total supply as implied by equation (5) above, i.e.,

$$(6) \quad \Delta D_p + \Delta D_g - (\Delta F_p + \Delta F_g) = (I_p - s_p X - i D_g + e i^* F_p) + (G - t X + i D_g + e i^* F_g) + (E - m X - e i^* F) = 0$$

where D_p , D_g and $F(=F_g+F_p)$ stand for, respectively, the stock of net private sector debt, net government debt, and net external liabilities, as accumulated through the financing of the three gaps (in parentheses on the right-hand side) 'after transfers' over time. The level of $-F$ is the 'after transfer' counterpart of net foreign assets A . The parameters i , i^* and e in equation (6) stand for the domestic interest rate, foreign interest rate and the nominal exchange rate. The formula permits detailed study of shifting patterns of effective demand.

8.2 Employment decompositions

Next, we take up decompositions of employment shifts. To save algebra, the formulas are presented in continuous time. That is, they are *not* set up in terms of discrete changes of the variables that they contain, even though this is how the data are always presented. With enough patience in writing down discrete-time first difference expansions, the right- and left-hand sides of all the decomposition expressions that follow can be made equal by balancing beginning- and end-of-period terms—see Pieper (2000) for examples. Such refinement is omitted here in the interest of ease of presentation.

In terms of notation, we consider changes from time $t-1$ to t , or from time zero to time one. The difference operator is Δ , i.e. $\Delta X = X_t - X_{t-1}$, and we set $\hat{X} = \Delta X / X_{t-1}$ to indicate a growth rate. Let P be the population, E the economically active population, L the total of people employed, and U the total unemployed or $U = E - L$. The participation rate is $\varepsilon = E / P$ and the unemployment rate is $\nu = U / E$. The employment rate is $L / E = 1 - \nu = \lambda / \varepsilon$ with $\lambda = L / P$ as the employed share of the population. Evidently, we have $E = L + U$. Dividing by P lets this expression be rewritten as $\varepsilon = \lambda + \varepsilon \nu$. Taking first differences and a bit of algebra show that

$$(7) \quad 0 = (1 - \nu)(\hat{\lambda} - \hat{\varepsilon}) + \nu \hat{\nu} = -(1 - \nu)\hat{\varepsilon} + \nu \hat{\nu} + (1 - \nu)\hat{\lambda}$$

The first expression basically states that changes in the rates of employment and unemployment must sum to zero. The second further decomposes this

condition in terms of the participation rate ε , the unemployment rate v , and the employed share of the population λ . In turn, the employment ratio, $\lambda = L/P$, provides a useful tool to analyse job growth across sectors. Let L_i be employment in sector i , with $L = \sum L_i$. Let X_i be real output in sector i , and $x_i = X_i/P$ or sectoral output per capita. The labour/output ratio in sector i can be written as $b_i = L_i/X_i$, and let $\lambda_i = L_i/P$. Then we have $\lambda = \sum (L_i/X_i)(X_i/P) = \sum b_i x_i$. Taking first differences gives

$$(8) \quad \hat{\lambda} = \sum \lambda_i (\hat{x}_i + \hat{b}_i) = \sum \lambda_i (\hat{x}_i - \hat{\rho}_i)$$

so that the growth rate of the overall employment ratio is determined as a weighted average across sectors of differences between growth rates of output levels per capita and labour productivity (with productivity defined as $\rho_i = X_i/L_i$, and $\hat{\rho}_i = -\hat{b}_i$). Combined with (7), equation (8) provides a framework in which sources of job creation can usefully be explored. In expanding sectors (relative to population growth), productivity increases do not necessarily mean that employment declines. Under liberalization, the interaction of non-traded and traded translate into reduced employment; in slow-growing or shrinking sectors, higher productivity sectors can be traced in this fashion, along with the behaviour of sectors acting as 'sources' or 'sinks' for labour (agriculture has played both roles recently, in different countries).

8.3 Labour productivity growth

Formalizing a suggestion by Syrquin (1986), one can also decompose growth of overall labour productivity $\rho = X/L = \sum X_i / \sum L_i$. The first difference decomposition is

$$\begin{aligned} \hat{\rho} &= \sum [(X_i/X)\hat{X}_i - (L_i/L)\hat{L}_i] \\ (9) \quad &= \sum (L_i/L)\hat{\rho}_i + \sum [(X_i/X) - (L_i/L)]\hat{X}_i \\ &= \sum (X_i/X)\hat{\rho}_i + \sum [(X_i/X) - (L_i/L)]\hat{L}_i \end{aligned}$$

The first line decomposes overall productivity growth into movements in output and employment, weighted by sectoral shares of these two variables. As discussed above, a common pattern under liberalization involved slow output growth and positive productivity growth in traded goods sectors, and faster output growth but low or negative productivity growth in non-traded. Across sectors, the outcome was fairly slow productivity growth overall.

The second and third lines show how overall productivity change can be written as a weighted average of sectoral productivity shifts plus a 'correction' term involving weighted reallocations of output or employment across sectors. The reallocation weights $[(X_i / X) - (L_i / L)]$ reflect differing productivity levels in different sectors. An output or employment loss in a low productivity sector (agriculture, for example, with a negative value of $[(X_i / X) - (L_i / L)]$), will add to overall productivity growth, as will an employment or output gain in a sector with a relatively high output/labour ratio. In the country studies, such reallocation effects were observed everywhere, but were economically important in only a few cases.

8.4 Capital and labour productivity and real earnings

Assuming two labour skill or ascriptive classes, total value-added nationally or in a sector can be written out as $PX = \Pi + w_1L_1 + w_2L_2$, where P is an output price index, w_1 and w_2 are wage levels for the two sorts of labour, and Π stands for other payment flows (profits in a broad sense, perhaps self-employment income, etc.) Let $\theta_i = w_iL_i / PX$. The first difference version of the decomposition of payments is then

$$(10) \quad 0 = (1 - \theta_1 - \theta_2)(\hat{\Pi} - \hat{P} - \hat{X}) + \sum \theta_i [(\hat{w}_i - \hat{P}) - (\hat{X} - \hat{L}_i)]$$

If a breakdown of value-added by components is available, (10) provides a useful means to think about productivity and payment shifts. If $\Pi = rPK$, where r is the profit rate and K the level of capital stock, then $\hat{\Pi} - \hat{P} - \hat{X} = \hat{r} + \hat{K} - \hat{X}$. With a rising capital/output ratio, a falling profit rate would be needed to open room for real (product) wage growth $\hat{w}_i - \hat{P}$ for labour type i to equal or exceed its productivity growth rate $\hat{X}_i - \hat{L}_i$. In practice under liberalization, such trends in favour of wage incomes were not observed. In the labour market itself, moderate wage and high productivity growth for skilled workers tended to combine with low or negative productivity and wage growth for the unskilled to maintain the equality in (10).

8.5 Structure of costs

Finally, it makes sense to extend the foregoing breakdown to consider the costs of producing total supply. Equation (1) above can be restated in nominal terms as

$$PX = \pi PX + iD_p + wbX + T + eP^*M$$

where π is the share of profits in total output. In a variation on (1), interest on private sector debt iD_p is (realistically) treated as a component of costs of production rather than as a transfer between sectors as is the usual practice in the national income accounts. Let the debt/output ratio be $\delta = D_p / PX$, the real import/output ratio $a = M / X$, and the cost of imports $z = eP^* / P$. Then a decomposition of the unit cost of output takes the form

$$(11) \quad 1 = \pi + i\delta + \omega b + za \quad .$$

Although the country papers did not use this precise formula, it can be used to say something about changes that were typically observed. Beginning at the far right, the real import cost z tended to fall due to appreciation of the exchange rate while the import share a rose—an ambiguous effect. Both the real wage ω and the overall labour/output ratio were stable or declined, i.e. b did not rise outside specific sectoral labour sinks. The effect of these changes on income accruing to capital could easily be favourable. Thus, the (real) interest rate i usually rose as did the volume of credit relative to output, δ —the FIRE sector was the main beneficiary. As already noted, π or the share of 'pure' profits in income may well have risen as well.

IX SUMMARY OF LIBERALIZATION'S OUTCOMES

To trace through all the changes described in previous sections, the first step is to examine how major economic aggregates shifted over time. Tables 1-3 give overviews of the main country findings regarding growth, employment, productivity, inequality, sources of effective demand, and overall macroeconomic performance. Their periodization is based on the policy 'episodes' identified by the country authors in their papers.

9.1 Growth and macro performance

Apart from years of overt crisis, most countries achieved moderate growth rates of GDP in the 1990s. As already observed, Russia and not quite so disastrously Jamaica, Paraguay, and Zimbabwe were the main losers. Except in Argentina before 1997-8, Chile, the Dominican Republic, India, and Korea prior to its crisis, rates of growth of household per capita income were negative or modestly positive. Toward the end of the decade, growth had tapered off in many countries due to emerging domestic financial crises (Paraguay, Colombia, Ecuador) or external events. Adverse foreign shocks included the impacts of the Asian crisis on capital flows to Russia and Brazil (with spillover

effects on Argentina), and falling export earnings for most primary exporting economies due to plummeting commodity prices.

Capital inflows increased substantially to most countries (in some cases, only prior to their respective crises). As discussed above, incoming foreign capital tended to be associated with increases in international reserves, domestic credit expansion, and real appreciation. Stronger exchange rates were generally associated with higher interest rates and increasing interest spreads. Capital inflows, credit creation, and real appreciation together stimulated aggregate demand to increase more rapidly than GDP, with consequent widening of the current account deficit.

9.2 Income inequality

Inequality of primary incomes increased in most countries. Virtually without exception wage differentials between skilled and unskilled workers rose with liberalization, reflecting employment reallocation as suggested in Figure 1. Relative to the economically active population (following the standard definition), the unemployment rate was stable or tended to rise, again consistently with Figure 1. Excess labour was absorbed in the non-traded, informal trade, and services sectors (Bolivia, Colombia, Ecuador, India, Peru, Russia) or where traditional agriculture served as a sponge for the labour market (Costa Rica, Guatemala, Mexico).

Primary income inequality seemed to increase for several reasons. In Argentina productivity increases in the traded goods sector affected all skill levels. With greater wage rigidity for unskilled workers, there was a reduction in earnings inequality in the sector. Increasing overall inequality was due to rising income concentration in the non-traded sector along with greater skill-intensity of new investment and to the rise of unemployment in traded goods. In contrast, in Mexico reorganization of manufacturing production was found to be a major source of greater skill demand in manufacturing, pushing up wage inequality in the traded goods sector with many of the displaced workers absorbed by agriculture (at least until 1994). As already indicated, in other cases productivity growth in traded goods pushed up skill differentials in that sector along with the gap between formal and informal sector workers.

In Colombia, primary inequality increased as people with low skill levels lost jobs and suffered real wage reductions—labour demand appeared insensitive to the wage cuts. In India, poverty and inequality both went up, in part because of policy-induced increases in food prices and cutbacks in public expenditure.

These initiatives were subsequently reversed, as policy responded to the political reaction that followed.

Tracing the distributional effects of two decades of liberalization in Korea is not easy. Through the 1980s, unemployment decreased, the wage share increased, wage inequality (Gini coefficient and the ratio of average wages in the top and bottom deciles) declined, skill premiums fell, and the wage differential between large and small enterprises went down. Rising wage and falling profit shares put distributional pressure on the traditional growth model, which had been led by investment demand supported by high corporate and household saving rates and a fiscal surplus. A transition toward growth led by consumption from wage income is as yet incomplete.

The favourable distributional trends petered out in the early 1990s, in part because of increased subcontracting by the *chaebol* (conglomerate firms) to domestic suppliers with lower wage and productivity levels, in Korea's version of the shifts depicted in Figure 1. When the crisis hit, the IMF imposed an outlandishly intense austerity package that lasted through mid-1998. The unemployment rate rose by five percentage points and the real wage fell by 9 per cent. Excepting the top decile which benefited from higher interest rates on its assets, average household incomes fell across the board, with the greatest reductions (on the order of 20 per cent) in the bottom deciles. Government spending on social support was increased in 1998, and following relaxation of the IMF's demand restraints there was strong output growth (partly led by domestic demand) in 1999. Whether the crisis will provoke a long-term trend toward increasing inequality in Korea remains to be seen.

One last example of distributional deterioration is in Russia. Prior to its demise, the Soviet system had two main proto-classes, the *nomenklatura* in charge of the party/state governing apparatus and the rest of the population. The *nomenklatura* were the clear gainers from the transition, as in connection with the criminal 'mafia' they seized control of the major productive assets in a blatantly rigged privatization process, and engaged in massive capital flight. The capital outflow largely offset any current account improvement from higher world prices or volumes of energy exports, leaving the economy in a difficult external position.

Employment increased in relatively successfully adjusting sectors such as energy, FIRE, and public administration, and was held fairly stable elsewhere. As in Cuba after its external shock, job protection combined with falling output and real wage reduction due to forced saving led to negative apparent productivity growth in virtually all sectors. The only Russians (the so-called

'new Russians') whose real earnings rose were people in upper income strata who benefited from forced saving and the rapid, corrupt privatization. In less than a decade, the Gini coefficient literally doubled, from around 0.3 to 0.6. Around four-fifths of the population are now poor or very poor according to the official poverty lines.

Only in a handful of economies is the distributional picture not mostly gloomy. In El Salvador and Costa Rica, rapid employment growth of unskilled workers, particularly in export sectors, offset widening between group (skill) differentials. In Chile, overall labour market tightening probably was the main factor behind a reduction in wage differentials in the 1990s.⁴ In Brazil, elimination of hyperinflation and labour demand shifts towards the unskilled have been factors underlying the dampening of primary income differentials. Earnings trends have also been influenced by minimum wage policies, such as in Ecuador where upward adjustments in the minimum wage allowed for a temporary decline in wage inequality (1992-5), despite an overall rising trend (1990-8).

9.3 Sources of effective demand

As noted in connection with Figure 1, Real exchange rate (RER) appreciation has been a central characteristic of the post-liberalization period in most countries. Trade expansion and diversification stimulated growth only where depreciation occurred or the currency was kept weak (Bolivia, Chile, Colombia 1990-2, Korea and Russia post-1998, Mexico post-1995, Uruguay 1986-90). Similar observations hold for small Latin American countries with credible incentive systems for non-traditional exports (Dominican Republic, Chile, Costa Rica, El Salvador, and Uruguay via MERCOSUR).

These observations are of interest because one of the principal justifications for external liberalization was its anticipated effect on trade performance. Due to efficiency gains induced by freer trade, 'export-led' growth was supposed to be an immediate consequence. It did not happen, at least in terms of effective demand generation in most of the countries in Table 2. As the detailed studies demonstrate, exports did tend to rise with liberalization but import leakages went up as well, especially when the local currency appreciated in real terms. Trade therefore held back or added weakly to effective demand. Growth

⁴ It should be recalled that liberalization began in Chile in the 1970s and inequality increased considerably up to the end of the 1980s.

stimulus from trade was present, but much less strongly than originally supposed by advocates of liberalization.⁵

The public sector's contribution to demand varied across countries. It was positive in Chile and Costa Rica, in Columbia due to increases in social spending, in Cuba as it recovered from external shocks in 1994-8, in India where the consolidated government deficit has supported demand for many years, and in Russia as plummeting demand was at least slowed by the fact that government spending did not decrease quite so rapidly as receipts from a failing taxation system. Elsewhere, government's impact on demand was broadly neutral. Positive or 'stop-go' public sector demand effects are a surprising outcome, given the rhetoric about downsizing the state that accompanied the drive toward liberalization.

Without strong contributions from the foreign and public sectors, private sector demand growth emerged as the major driving force in several countries. In particular, import-led consumption booms following trade and financial liberalization were the rule rather than the exception. They were triggered by both cheapening of imported traded goods (import liberalization and real exchange rate appreciation) and expansion of domestic credit supply (fomented by the surge in capital flows and domestic financial liberalization). Private savings rates fell in consequence. Fewer cases were observed in which domestic demand was driven by expanding private investment, but it did occur in Argentina, Chile, and Korea in the 1990s. The rapid reduction in demand in Russia was provoked by an investment collapse in an economy that had historically been driven by high rates of accumulation. In Mexico late in the decade, higher private capital formation could give hope for a brighter future were it not for a setback due to global instability in 1998-9.

9.4 Productivity and employment growth

With Korea prior to its crisis as a notable exception, only modest aggregate productivity increases were observed. Where data are available, they are broadly consistent with greater observed productivity growth in traded than non-traded sectors. As observed above, the change in aggregate productivity is result of the sum of productivity changes by sectors (weighted by sectoral output shares) plus a positive reallocation effect if labour moves from low- to high-productivity sectors. Findings from the country studies indicate that

⁵ By way of clarification, *effects* of changes in saving, tax, and import parameters are reported with positive signs in the tables. For example, the saving rate dropped sharply in Mexico in 1988-94, strongly stimulating aggregate demand.

within-sector productivity shifts and output growth rates largely determined the aggregate outcomes. However, in some cases there was a negative reallocation effect as workers moved toward low productivity non-traded goods sectors. In Guatemala, Mexico, and Ecuador these sectors served as important 'employers of last resort'.

With Cuba and Russia as exceptions, the share of the economically active population (or the 'participation rate') increased under liberalization. With the exception of Turkey, the unemployed as a proportion of the economically active went up as well, especially after crises and/or later in the decade. Given the modest growth of GDP noted previously, a lacklustre employment performance under liberalization is scarcely surprising.

X POLICY ALTERNATIVES

The usual caveats about policy prescriptions apply. Given the diversity of country experiences just reported, it is risky to generalize about lessons and conclusions. Of course, diversity of outcomes is a result in itself. It negates general sweeping statements about whether the reforms have been exclusively beneficial or exclusively costly in terms of growth, employment, and equity.

If one is to sing a sad song, however, the evidence certainly shows that in the post-liberalization era few if any of the countries considered seem to have found a sustainable growth path. Employment growth has generally been slow to dismal and rising primary income disparity (in some cases over and above already high levels of inequality) has been the rule.

Better performances such as those in Mexico and Korea after their financial crises (as of the year 2000, three years of sustained growth in Mexico and one in Korea) were associated with avoiding the macro price mixture of a strong real exchange rate and high domestic interest rates. Post-crisis effective demand was led by the foreign sector in Mexico and by private consumption and investment spending in Korea, suggesting that each recovering country may have its own particular demand path.

Similar conclusions apply to the handful of Latin American economies that combined adequate growth with improvement or stability of indexes of inequality. Their better performances were associated with a policy mix that combined (a) avoiding a macro price mixture of real exchange rate appreciation and high domestic interest rates, (b) maintaining a system of well-directed

export incentives whether put in place at the national level or as part of regional integration agreements, and (c) having a system of capital controls and prudential financial regulation able to contain the negative consequences of capital surges. In some cases, cross-border financial flows were extremely important, e.g. emigrant remittances in El Salvador are more than 10 per cent of GDP.

For the other countries, the news is less good. Turkey and Argentina continue to wander in a slow growth, falling employment, and increasing inequality wilderness. India's growth and equity performance has not improved with liberalization, and despite a strong effort on the social policy front, Colombia's is worse. In part because of an explicit effort to cushion the liberalization shock, Cuba's growth and equity performances are mediocre. Jamaica's, Zimbabwe's and especially Russia's are disasters.

Of the three views regarding liberalization mentioned at the outset, the first 'market friendly' narrative is hard to discern in the countries analysed here. In line with the second view, some might argue that their distributional deterioration was *not* the result of liberalization and globalization but they would have to strain to make the case. For most of the countries, it is difficult to refute the third view that liberalization and deteriorating growth and equity performances can easily go hand-in-hand.

Finally, fundamental questions arise regarding social coherence and social policy. The mainstream view of liberalization emphasizes its likely positive effects on economic performance. Adverse transitional impacts can in principle be smoothed by social policies, and in any case after some time 'a rising tide lifts all boats' (except for, is as sometimes added, the ones that sink). The much more disquieting possibility is that liberalization can unleash dynamic forces leading not only to an unimpressive aggregate economic performance but also to long-term slow employment expansion and increasing income concentration. In principle, governments could put countervailing social policies into place. In practice, they probably lack the capacity to do so because of their own fiscal and administrative limitations.

Such constraints on social policy and burden-sharing can be reduced by investment in the capability of the state, as experience in now industrialized countries demonstrated in the 19th century and again after World War II in the construction of welfare states (Polanyi 1944). But an explicit political decision would be needed before such investments could be undertaken. It would be comparable in scope to the one that led to the worldwide spread of liberalization in the first place. Nevertheless, for the countries considered here,

the initial outcomes of liberalization suggest that a 'double movement' á la Polanyi, first toward and then away from an extreme liberal policy stance, could be forthcoming in the not-so-distant future. Inadequate social performance of any economic policy line leads ultimately to its reversal as society organizes to protect its own.

TABLE 1: GROWTH, EMPLOYMENT AND INEQUALITY

								Income inequality		Employment structure	
		Periods	Characterization	Growth	RER	Employment rate	Real wages	Overall primary incomes (labour force)	Skilled/ unskilled	Traded / non-traded	Formal / informal
1	Argentina	1991-4	Plan Conv, Expansion I	8.9	+	+	++	+	+		
		1995	Tequila effect	-4.6	+	-	--	+	+		
		1996-7	Expansion II	6.5	+	-	+	+	+		
2	Bolivia	1980-5	Destabilization	-1.6	+	-	-				
		1986-9	Stabilization	1.6	-	-	+	+	+	-	
		1990-7	Post-liberalization	4.2	-	+	+/-	+	+	0/-	+
3	Brazil	1982-6	Pre-reform period	4.4	+	+	+	0	-	-	+
		1987-91	Liberalization	-0.3	-	0	-	0	0	-	+
		1992-4	Post-Liberalization I	5.4	-	-	+	0	+	+	-
		1994-7	Post-Liberalization II	3.2	+	-	+	0	-	-	0
4	Chile	1970-4	Demand expansion, hyperinfl.	1.0	+	+	--	-	-	+	
		1976-81	Liberalization	9.4	+	+	++	+	+	-	
		1985-9	Readjustment	8.4	-	++	+	+	+	-	
		1990-7	Free trade agreements	9.4	+	+	++	-	-	-	
5	Colombia	1992-5	Liberalization and boom	5.2	+	+	++	+	+	-	+
		1995-8	Stagnation	1.4	+	-	+	+	+	-	-
6	Costa Rica	1985-91	Trade lib. (CA)	3.7	+	+	-		+	-	+
		1992-8	Further opening	4.3	0	+	+		+	--	+
7	Cuba	1989-93	Opening forex market	-8.5	++	+/0	--	+		+	--
		1994-8	Fiscal adj, flexib. own-account act.	4.4	-/+	-/0	+	-		-	--

8	Domin. Rep.	1991-8	Post-liberalization	6.1	++	+	+	+	+	-	+
9	Ecuador	1988-91	Pre-reform	2.6	-	+/-	-	+	+	-	-
		1992-8	Stab. & liberalization	2.7	++	-/+	+	+	+	0	-
10	El Salvador	1980-2	BoP Crisis	-9.5	+	--	-	-	+		
		1983-9	War Economy	1.3	++	-	-	-	+		
		1990-5	BoP + financial liberaliz'n	6.0	++	+	0/-	+	-		
		1996-8	Demand Contraction	3.0	+	0/-	0/-	0/+	-		
11	Guatemala	1987-92	BoP liberalization	3.9	-		-			+	-
		1992-7	BoP cum dom. fin. lib.	4.0	+		+			+	-
12	Jamaica	1980-9	Pre-liberalization	1.6	+	+			+	-	+
		1990-2	Financial liberalization	1.2	+	+	--		+	-	+
		1993-8	Trade liberalization	-0.7	+	-	+		+	-	+
13	Mexico	1988-4	Trade + financial liberalization	3.9	++	+/-	+	+	+		
		1994-5	Peso crisis and NAFTA	-6.2	--	--	--	+	+		
		1996-8	Post-crisis	5.8	+	+	-				
14	Paraguay	1988-91	Trade & exchange rate reform	3.8	-	+/0	+	+	+	-	+
		1992-4	MERCOSUR	3.6	+	0	+	+	+	-	-
		1995-8	Financial reform	2.0	+	-	+/0	+	+	-	+
15	Peru	1986-90	Hyperinflation	-1.1	++	-	--	-	-	-	-
		1991-8	BoP liberalization	4.9	+/0	+	++	-/0	+	+	+
16	Uruguay	1986-90	Pre-Mercosur	2.5	-	0	+	0/-	-	+/0	0
		1990-7	MERCOSUR	4.1	+	-	+/-	+/0	+	-	0/-
17	India	1986-91	Pre-reform period	5.9	+	+	+	+	+	-	-
		1992-6	Liberalization	5.3	-/+	+	-	-	+	-	-

18	Korea	1980-8	Lib., depreciation, boom	9.4	+/-/+	+	++ (6.0)	++	--	++	+
		1988-93	Appreciation, slowing growth	7.2	-	0	++ (9.4)	+	0/-	+	+
		1993-7	Capital account liberalization	7.5	+/-	+/0	++ (5.4)	0	0	+	+
		1997-8	Financial crisis	-5.8	--	--	-- (-9.3)	--	++	--	--
19	Russia	1990-2	Declining growth	-9.8	-	--	--	--	--	0/-	0
		1992-4	Lib. of current account	-10.7	++	--	+/-	-	+	-	--
		1994-7	Convertibility, capital acct. lib.	-2.2	++	--	--/+	0	+	-/+	-
		1998	Crisis	-4.6	-	-	-	-	-	0/-	0
20	Turkey	1980-8	Exp. promotion and trade lib.	5.4	--	++	-	--	+	+	-
		1989-93	Unregulated fin. liberalization	4.8	++	+	++	+	++	-	--
		1994	Financial crisis	-5.5	--	+/0	--	-	+	-	-
		1995-7	Post-crisis adjustment	7.2	+/0	+	+/0	-	++	-	-
21	Zimbabwe	1986-90	Pre-liberalization period	5.2	-	+	+	+	+	+/0	+/0
		1991-2	Transition and drought	-1.8	+	0/-	--	-	+	--	-
		1993-7	Post-liberalization period	3.6	-	0	-	-	+	-	-

Source: Ganuza *et al.* (2001) and Taylor (2000).

Variables key: ++ = strong increase; + = increase; +/0 = slight increase, almost stable; 0 = no change

0/- = slight decrease, almost stable; - = decrease; -- = strong decrease

+/-/+ = fluctuating trend (stop-go)

Growth = annual rate of GDP

RER = real exchange rate (+ = real appreciation)

Employment rate = change in employed as share of EAP (+ = rise in employment or decrease in unemployment)

Real wages = change in average wage rate

Inequality = refers to per worker primary income (wages, other) (+ = rising inequality)

change in ratio earnings of skilled and unskilled workers

TABLE 2: AGGREGATE DEMAND DECOMPOSITION

<i>Demand decomposition</i>				Aggregate demand	Direct multiplier effects			Effect of leakages			Decomposition of effective sources of change in aggregate demand (see terms at bottom of table)		
		Periods	Characterization		I/s	G/t	E/m	s	t	m	private spending ("investments"-"savings")	government spending ("government"-"tax")	external demand ("exports"-"imports")
1	Argentina	1990-4	Private consumption boom	9.6	+	n.a.	--	+/-	n.a.	-			
		1995-6	Private demand contraction	0.5	-	n.a.	+	+	n.a.	+			
		1996-7	Private demand (C,I) recovery	10.1	+	+/0	-	0	-	-			
2	Bolivia	1980-5	Private consumption + govt led	-1.5	+	--	+/-	++	0	+/-	+	-/+	+
		1986-9	Export led	2.1	-/+	0	+	-	0	0	-	-/+	-/+
		1990-7	Export led	4.8	+	+	+	-	0	-	-/+	0	-/+
3	Brazil	1982-6	Govt. and export led	-0.9	0	+	+	-	0	+			
		1987-91	Govt. led	3.0	-	+	-	-	-	-			
		1992-4	Private cons. and govt. led	0.9	+	+	-	0	-	-			
		1994-7	Private invest. + consumption	5.2	+	-	-	+	0	-			
4	Chile	1970-4	Private and gov. cons.	1.0	--	+	-	--	0/-	+/0	0.2	2.7	-1.9
		1976-81	Cons. squeeze, exports	9.4	0	+	-	0/-	-	+	7.4	1.6	0.4
		1985-9	Investment, exports	8.4	++	+/0	++	+/0	+/0	+	5.8	0.2	2.4
		1990-7	Investment, exports	9.4	++	+/0	++	-	+/0	+	6.5	0.2	2.7
5	Colombia	1990-2	Export and govt. led	2.2	-	++	+	-	0	-	-9.2	3.9	5.3
		1992-5	Private consumption boom	9.6	-	+	+	++	-	-	4.6	1.7	0.5
		1995-8	Private exp. contraction	1.5	--	+/-	+	0	0	-	-2.0	3.6	1.0

6	Costa Rica	1985-91	Export led	5.7	+	+	++	-	++	-	1.7	0.7	3.3
		1992-8	Export led	6.5	+	+	++	+/0	+	-	0.4	0.7	5.4
7	Cuba	1989-93	Private demand squeeze	-13.7	--	--	++	--	+	--	-61.6	6.9	13.4
		1994-8	Publ. exp + export recovery	7.0	++	++	+	++	-	-	52.8	-41.1	6.4
8	Domin. Rep.	1991-7	Private demand + export led	8.8	+	+	+	-	0	-	4.7	1.2	2.9
9	Ecuador	1988-91	Private demand	4.4	+	0/-	-	+	-	0			
		1992-8	Export led	2.9	-	0	++	-	0	0			
10	El Salvador	1990-5	Investment and export	41.7	++	-	+	+	--	--			
		1996-7	Export	6.7	--	++	++	--	+	-			
11	Guatemala	1986-91	Consumption led	3.4	+	+/0	0	+/0	0/-	-	2.8	0.8	-0.3
		1991-8	Consumption led	5.0	+/0	+/-/+	+	+	-	-	3.0	0.8	1.1
12	Jamaica	1980-9	Private consumption led	2.0	+	-	0	++	-	0			
		1990-2	Export led	8.1	-	-	+	-	+	-			
		1993-8	Private dem. + export contraction	-3.1	+/- /+	+	-	+	+	+			
13	Mexico	1988-94	Consumption boom	5.5	++	+/0	-	++	0	--			
		1994-5	Crisis and cons. squeeze	-7.8	--	0	++	-	+	+			
		1996-8	Investment recovery	8.3	+	+/0	0	-	0	--			
14	Paraguay	1988-91	Private demand expansion	6.7	+	+	0/-	-/+	0	-			
		1992-4	Private demand expansion	10.8	+	-	0/-	++	0	-			
		1995-8	Private dem. + exp contract'n	-0.6	+	+	-	+	0/-	+			
15	Peru	1986-90	Collapse private demand	-1.9	++	+	-	+	+	+	2.7	-1.3	-3.4
		1991-7	Private demand recovery	5.6	++	+	-/0	-	-	-	5.1	1.1	-0.6
16	Uruguay	1986-90	Exp. led, priv. dem. squeeze	2.9	-	-/+/-	+	0	0	0	0.7	0.6	2.7
		1990-4	Private demand expansion	8.4	++	+/0	-	++	-/+	--	8.2	1.0	-1.0
		1994-7	Private demand and exports	4.4	-/+	-	+	+/0	0/-	-	2.5	-0.0	1.7

17	India	1986-91	Pre-reform period	5.4	0	++	-	-	+	-			
		1992-6	Liberalization	7.5	-	+	-	-	+/-	--			
18	Korea	1980-8	Lib., depreciation, boom	8.3	+/0	-	+	-	0/-	+			
		1988-93	Appreciation, slowing growth	6.9	+	0	0	-	0/-	0			
		1993-7	Capital account liberalization	9.6	++	0	0/-	+	+/0	-			
19	Russia	1990-2	Declining growth	2.4	--	++	+/0	n.a.	+	--			
		1992-4	Lib. of current account	-19.2	--	+	-	+	++	-			
		1994-7	Convertibility, capital acct. lib.	-3.0	--	+	-	+	++	--			
20	Turkey	1980-8	Exp. promotion and trade lib.	6.2	+	--	-	+/-	-	-			
		1989-93	Unregulated fin. liberalization	5.2	+	++	-	+	+/0	--			
		1994	Financial crisis	-4.9	+	-	-	-	--	+			
		1995-7	Post-crisis adjustment	10.1	+	+/0	--	+	+/0	--			
21	Zimbabwe	1986-90	Pre-liberalization period	5.5	+	+	+	+	-	-			
		1993-7	Post-liberalization period	4.6	+	-	++	+	0	-			

Source: Ganuza *et al.* (2001) and Taylor (2000).

Variables key: ++ = strong increase; + = increase; +/0 = slight increase, almost stable; 0 = no change

0/- = slight decrease, almost stable; - = decrease; -- = strong decrease

+/-/+ = fluctuating trend (stop-go)

Aggregate demand = GDP + Imports (numbers refer to annual rates of growth).

Decomposition aggregate demand: direct own multipliers and leakages: see Taylor *et al.* (1998), project methodology

Decomposition of change in aggregate demand: see Ocampo, Tovar and Sanchez (1999: Rio paper)

$X^* = bX/X0 = -Ds (A0/gX0) -Dt (A0/gX0) -Dm (A0/gX0) + DI (a0/gX0) + DG (a0/gX0) + DE (a0/gX0)$

tax imports investment government exports

where $A0 = I0 + G0 + E0$

$a0 = s0 + t0 + m0$

$g = a0 (s0 + t0 + m0)$

TABLE 3: PRODUCTIVITY AND EMPLOYMENT

		Periods	Characterization	Productivity growth			Sector reallocation effects	Labour supply decomposition		
				Overall	T	NT		Employment	Particip. rate	Unemploy. rate
1	Argentina	1990-4	Plan Conv, Expansion I	7.8	n.a.	n.a.	negative	+	++	--
		1995-6	Tequila effect	2.7	n.a.	n.a.	negative	+	++	0/-
		1996-7	Expansion II	1.2	n.a.	n.a.	small	+	-	+/0
2	Bolivia	1980-92	Destabilization/stabilization	-3.0	-3.2	-3.2				
		1992-7	Post-liberalization	1.0	1.0	0.8				
3	Brazil	1982-6	Pre-reform period	0.7	2.0	-0.4		+	-	+
		1987-91	Liberalization	-4.0	-2.4	-5.1		0	0	0
		1992-4	Post-Liberalization I	4.4	2.4	4.6		+	+	-
		1994-7	Post-Liberalization II	0.9	4.4	-1.2		0	+	-
4	Chile	1970-4	Demand expansion, hyperinfl.	0.8	0.1	1.3	small	-	+	+/0
		1976-81	Liberalization	2.6	3.7	1.9	small (-)	+	-	+
		1985-9	Readjustment	0.1	-1.2	0.9	small (-)	+	-	+
		1990-7	Free trade agreements	3.9	4.8	3.5	small (-)	+/0	-	+/0
5	Colombia	1992-5	Liberalization and boom	2.6	2.7	2.9	small			
		1995-8	Stagnation	2.0	2.8	1.9	small			
6	Costa Rica	1987-91	Trade lib.	1.5	2.3	0.9	small	-	-/0	-/0
		1992-8	Further opening	0.6	3.0	-1.0	small	+	-/0	+
7	Cuba	1989-93	Opening forex market	-8.3	-13.7	-5.0	0	-	+	+/0
		1994-8	Fiscal adj, flexib. own-account act.	4.1	11.1	0.1	0	-	-	-/0
8	Domin. Rep.	1991-6	Post-liberalization	3.5	5.7	2.3	small	-	-	+

9	Ecuador	1992-7	Post-reform	0.1	1.3	-0.9	large (away from NT)	0	-	+
10	El Salvador	1991-5	BoP and financial liberaliz'n	14.3	-0.6	31.3	large			
		1995-6	Demand contract	9.6	4.4	14.0	small			
11	Guatemala	1987-92	BoP liberaliz'n	0.4	-0.4	1.1	large	0		
		1992-7	BoP cum dom. financial lib.	0.3	-1.3	0.8	large	0/-		
12	Jamaica	1980-9	Pre- liberaliz'n	3.2	1.7	0.9	small	0	-	+
		1990-2	Financial liberaliz'n	3.7	1.2	2.1	small	0	-	+
		1993-8	Trade liberaliz'n	-1.0	0.5	-1.6	small	+	+	-
13	Mexico	1988-93	Financial liberaliz'n	0.6	6.0	-0.5	small			
		1994-7	Peso crisis, NAFTA, adjustm.	-0.8	-0.2	-2.1	small			
14	Paraguay	1982-92	Trade + exchange rate reform	-0.4	1.2	-2.5	large (away from T)	+	+/-	-
		1992-7	MERCOSUR + fin. liberaliz'n	-5.7	-2.1	-8.7	large (away from T)	+	-/0	+
15	Peru	1986-90	High Inflation Period	0.7	1.1	0.6		-	+	-
		1991-8	BoP liberaliz'n	0.6	1.1	0.5		+	-	+
16	Uruguay	1986-90	Pre-Mercosur	0.4	-0.7	0.6		+	-	-
		1990-4	MERCOSUR (I)	3.8	0.0	2.2		+	-/0	-
		1994-7	MERCOSUR (II)	2.7	6.5	2.4		+	+	+
17	India	1986-91	Pre-reform period	3.8	n.a.	n.a.	none	+	-	+/0
		1992-6	Liberaliz'n	2.5	n.a.	n.a.	negative	+	+/0	0/-
18	Korea	1980-8	Lib., depreciation, boom	6.4	n.a.	n.a.	large	++	--	+
		1988-93	Appreciation, slowing growth	4.8	n.a.	n.a.	large	++	0	+
		1993-7	Capital account liberaliz'n	5.3	n.a.	n.a.	small	+	0/-	+
		1997-8	Financial crisis	n.a.	n.a.	n.a.	negative	-	++	-
19	Russia	1990-2	Declining growth	-7.5	-9.5	-5.5	negative	+/0	++	--

		1992-4	Lib. of current account	-8.5	-11.0	-6.0	negative	-	++	--
		1994-7	Convertibility, cap. acct. lib.	-1.0	9.0	-5.5	none	-	++	--
		1998	Crisis	-3.0	-3.0	-4.0	negative	0	+	-
20	Turkey	1980-8	Exp. promotion + trade lib.	2.6	-2.1	8.3	small	+	--	++
		1989-93	Unregulated fin. liberaliz'n	1.7	1.2	2.3	none	+	-	+
		1994	Financial crisis	-7.5	-13.1	-0.6	negative	0	0/-	+/0
		1995-7	Post-crisis adjustment	3.5	3.2	3.9	none	+	-	+
21	Zimbabwe	1986-90	Pre-liberalization period	1.5	1.2	1.6	none	+/0	-	+
		1991-2	Transition and drought	-3.0	-6.8	-0.2	negative	0	+	0/-
		1993-7	Post-liberalization period	0.9	-1.0	2.4	negative	+/0	0	0

Source: Ganuza *et al.* (2001) and Taylor (2000).

Variables key: Productivity growth = annual rate of change of productivity (Q/L)

T = traded goods sectors

NT = non-traded goods sectors

Reallocation effects: see decomposition methodology in Taylor *et al.* (1998).

REFERENCES

- Amadeo, Edward J. and Valeria Pero (2000). 'Adjustment, Stabilization, and the Structure of Employment in Brazil', *Journal of Development Studies*, 36 (4).
- Ganuza, Enrique, Ricardo Paes de Barros, Lance Taylor and Rob Vos (eds), 2001). *Liberalizacion, Desigualdad y Pobreza: America Latina y el Caribe en los 90*, EUDEBA (Editorial Universitaria de Buenos Aires): Buenos Aires.
- Godley, Wynne (1999). *Seven Unsustainable Processes*, Jerome Levy Economics Institute: Annandale-on-Hudon, NY.
- Hicks, John R. (1965). *Capital and Growth*, Clarendon Press: Oxford.
- Kindleberger, Charles P. (1996). *Manias, Panics and Crashes (3rd edition)*, John Wiley and Sons: New York.
- Krugman, Paul and Lance Taylor (1978). 'Contractionary Effects of Devaluation', *Journal of International Economics*, 8: 445-56
- Londoño, Juan Luis and Miguel Székely (1998). 'Sorpresas Distributivas después de una Década de Reformas', *Pensamiento Iberoamericano-Revista de Económica Política* (Special Issue).
- Ocampo, José A. and Lance Taylor (1998). 'Trade Liberalization in Developing Economies: Modest Benefits but Problems with Productivity Growth, Macro Prices and Income Distribution', *Economic Journal*, 108: 1523-46.
- Pieper, Ute (2000). 'Openness and Structural Dynamics of Productivity and Employment in Developing Countries: A Case of Deindustrialization?' *Journal of Development Studies* (forthcoming).
- Polanyi, Karl (1944). *The Great Transformation*, Rinehart: New York, NY.
- Ros, Jaime (1999). 'La Liberalization de la Balanza de Pagos en Mexico: Efectos en el Crecimiento, el Empleo y la Desigualdad Salarial', paper presented at UNDP-CEPAL-IDB conference on the *Effects of Balance of Payments Liberalization on Employment, Distribution, Poverty and Growth*, Rio de Janeiro, February.
- Sen, Amartya (1999). *Development as Freedom*, Alfred A. Knopf: New York, NY.
- Stolper, Wolfgang F. and Paul A. Samuelson (1941). 'Protection and Real Wages', *Review of Economic Studies*, 9: 58-73

Syrquin, Moshe (1986). 'Productivity Growth and Factor Reallocation', in Hollis B. Chenery, Sherwin Robinson and Moshe Syrquin (eds), *Industrialization and Growth*, Oxford University Press: New York, NY.

Taylor, Lance (1991). *Income Distribution, Inflation, and Growth*, MIT Press: Cambridge, MA.

Taylor, Lance (1999). 'The Exchange Rate is Indeterminate in the Portfolio Balance and Mundell-Fleming Models—Each Has One Fewer Independent Equation than People Usually Think', (processed) New School for Social Research: New York, NY.

Taylor, Lance (ed.) (2000). *External Liberalization, Economic Performance, and Social Policy*, Oxford University Press: New York.

Vos, Rob (1995). 'Financial Liberalization, Growth and Adjustment: Some lessons from Developing Countries', in Stephany Griffith-Jones and Zdenek Drábek (eds), *Financial Reform in Central and Eastern Europe*, Macmillan: London.

Wood, Adrian (1997). 'Openness and Wage Inequality in Developing Countries: the Latin American Challenge to East Asian Conventional Wisdom', *World Bank Economic Review*, 11: 33-57.

