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## THE BAKER HYPOTHESIS

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## **ABSTRACT**

In 1985, James A. Baker III's "Program for Sustained Growth" proposed a set of economic policy reforms including, inflation stabilization, trade liberalization, greater openness to foreign investment, and privatization, that he believed would lead to faster growth in countries then known as the Third World, but now categorized as emerging and developing economies (EMDEs). A country-specific, time-series assessment of the reform process reveals three clear facts. First, in the 10-year-period after stabilizing high inflation, the average growth rate of real GDP in EMDEs is 2.2 percentage points higher than in the prior ten-year period. Second, the corresponding growth increase for trade liberalization episodes is 2.66 percentage points. Third, in the decade after opening their capital markets to foreign equity investment, the spread between EMDEs average cost of equity capital and that of the US declines by 240 basis points. The impact of privatization is less straightforward to assess, but taken together, the three central facts of reform provide empirical support for the Baker Hypothesis and suggest a simple neoclassical interpretation of the unprecedented increase in growth that has taken place in EMDEs since 1995.

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## **1. Introduction**

On October 8, 1985, then Secretary of the United States Treasury, James A. Baker III, unveiled a "Program for Sustained Growth" at the International Monetary Fund (IMF), World Bank meetings in Seoul, South Korea. In his remarks, Baker enumerated a list of economic policy reforms—inflation stabilization, trade liberalization, greater openness to foreign investment, and privatization—that he urged "Third World" leaders to adopt to enable their countries to grow their way out of the debt crisis that had been precipitated by Mexico's default on its external obligations three years earlier. Later codified and branded "The Washington Consensus" by Williamson (1989), while labeled "neoliberalism" by others (e.g., Chomsky 1998, Stiglitz 2002), Baker's speech unleashed a contentious debate about the economic impact of his recommended reforms that remains unresolved. Liberal opponents argue that the Washington Consensus failed (Rodrik 2006). Conservative proponents contend, instead, that reforms have been found difficult and left untried (Krueger 2004, Gil Diaz 2003).

From the perspective of the Solow growth model, the tenets of Baker's speech constitute a testable claim that can be confronted with data: "If developing countries implement reform(s) then their standards of living will rise at a faster rate than they did before the implementation." After decades of debate, the Baker Hypothesis has yet to be confronted directly, appropriately, and comprehensively with data. Sachs and Warner (1995), Rodriguez and Rodrik (2000), and others attempt to evaluate the impact of reforms on economic performance by running crosssectional growth regressions and therefore test a hypothesis that is patently incongruent with a fundamental prediction of the Solow model.

Cross-sectional regressions of growth on policy variables ask: is it the case that countries with low inflation, free trade, and liberalized capital accounts have higher long-run growth rates

(30-year-averages, say) than countries with high inflation, restricted trade, and closed capital accounts? This question does not confront theory with data, however, because the model does not predict that countries that have reformed will grow faster than countries that have not. What the model does predict—and the Baker Hypothesis implicitly claims—is that if a given country implements and maintains a certain economic reform, then it will grow faster in the aftermath of the reform than it did prior to implementation. The period of faster growth will persist until the country has completed its transition to the new, higher level of total factor productivity induced by the reform, and once the transition is complete, the country will revert to its pre-reform, steady state rate of growth. Because cross-sectional growth regressions run afoul of the model, they are likely to yield insignificant results when the data would say otherwise if given the chance to speak (Easterly 1996; Henry 2007; Wacziarg and Welch 2008).

This article gives voice to the data by taking seriously the country-specific, time series predictions of the Solow model. Figure 1 documents the precipitous and persistent decline after 1994 in the average annual rate of inflation across the set of formerly Third World nations that are now classified by the IMF's World Economic Outlook (WEO) as emerging and developing economies (EMDEs). The fall in inflation is a proxy for the salient change of direction in the economic policies and priorities of leaders in much of the developing world that was set in motion by Baker's speech and took root in 1989 after the announcement of the Brady Plan and the fall of the Berlin Wall (Williamson 2004). Beyond the task of vanquishing high inflation, this change of direction manifested itself through the adoption of policies that: (1) created freer trade; (2) increased openness to flows of foreign investment; and (3) expanded the role of the market in producing and allocating goods and services. The widespread, if uneven, adoption of these policies—commonly referred to as the "Washington Consensus mantra of stabilize, liberalize,

and privatize" (Gertz and Kharas 2019)—by EMDEs *circa* 1994 provides a unique set of policy experiments that enable an objective observer to examine whether the time paths of GDP and other real variables in the aftermath of reforms refute or support Baker's implicit "if-then" claim.

Accordingly, Figure 2 provides a visual test of the Baker Hypothesis that reveals three facts. First, the growth rate of real GDP in the emerging world has been higher since 1994 than it was in the previous period for which the WEO provides historical data. From 1980 to 1994, real GDP in the EMDEs grew at an average rate of 3.3 percent per year versus 5.3 percent per year from 1995 to 2018. This 2.0 percentage-point increase in growth is economically significant. For a country whose population grows at 1 percent per year, annual GDP growth of 3.3 percent growth, the same country's standard of living doubles in just 16. Furthermore, the EMDEs increase in growth is not due to China. China's growth averaged 10.1 percent from 1980 to 1994 and then slowed to 9.2 percent from 1995 to 2018. Figure 2, therefore, understates the EMDEs growth acceleration without China.

Second, there is no evidence to support arguments that faster growth in poor countries comes at the expense of average living standards in rich ones. Excluding the years 2007–2012, a period of slower growth due to the Global Financial Crisis that originated in the developed world, there has been no change in the growth rate of rich-countries. Their real GDP expanded by 2.9 percent per year from 1980 to 1994 and 2.9 percent from 1995 to 2007.

The third fact is that the unchanged growth performance in rich countries suggests that the accelerated rise of living standards in poor ones was not driven by an aggregate shock to the global economy, but rather by factors specific to EMDEs. Vast supplies of low-cost labor in the rural and informal economies of poor countries surely played a role in sustaining the growth

process per the first assumption of Lewis (1954). But from 1995 to 2018 there was no change in the demographics of the developing world to suggest that an increase in the growth rate of its labor force was responsible for the growth acceleration. Indeed, from 1995 to 2018, the growth rate of the labor force in Asia and Latin America was actually decreasing (and was roughly constant in Africa), even as EMDE growth rates of real GDP were rising.

Instead, the proximate cause of the growth acceleration in EMDEs was the set of countryspecific economic reforms, suggested by Figure 1, that moved conditions in the developing world more closely in line with the spirit of the second assumption of Lewis (1954). In countries that implemented and maintained reforms, the level of productivity rose. With wages remaining flat for an extended period of time due to a perfectly-elastic supply of labor, owners of capital had a persistent incentive to invest, triggering, in turn, a cycle of sustained profitability and expanding demand for previously underemployed workers.

Starting from the creation of macroeconomic stability, a condition without which there is no sustained growth (Commission on Growth and Development 2008), the rest of this article provides a country-specific, time-series assessment of the economic reform process. The empirical validity of the Baker Hypothesis, which conjectured what reforms would make economies grow, stands in sharp contrast to the failure of the Baker Plan, which failed to articulate a realistic strategy for how leaders could actually bring about the subset of reforms best suited to their countries.

## 2. Stabilization of Inflation

Fiscal deficits were the structural cause of both the inflation and debt difficulties in much of the developing world during the late 1970s and early 1980s. Public officials from Kingston to Kuala Lumpur ran large deficits, causing their countries' stock of public debt to increase faster than GDP. When debt-to-GDP ratios breached critical thresholds, access to foreign financing ceased. Governments increasingly turned to monetization as an alternative source of funding, and inflation rose. By 1985, the average rate of inflation in the developing world was over 40 percent per year, leading Baker to declare "If the debt problem is going to be solved, there must be...First and foremost, the adoption by principal debtor countries of comprehensive macroeconomic and structural policies, supported by the international institutions, to promote growth and balance of payments adjustment, and to reduce inflation." (Baker, 1985, p.207).

The intellectual justification for Baker's call to reduce inflation flows from the reality that stabilizing high inflation raises productivity, because, among other reasons, stabilization reduces the variance of the aggregate price level, as well as the variance of relative prices. Variability of the aggregate price level matters, because greater variability of inflation increases the likelihood of bouts of unexpected inflation (Ha, Kose, and Ohnsorge 2019; IMF 2001). Because unexpected inflation helps borrowers and hurts lenders, fear of unexpected inflation in non-inflation-indexed environments may discourage lenders from entering into long-term contracts with negative attendant consequences for production and investment. Also, rising inflation that goes unchecked eventually becomes high inflation. High inflation is not neutral and therefore creates relative price distortions that reduce the quality of the signal that individual prices provide to producers about the profitability of goods and services (Andres and Hernando 1999). Again, increased uncertainty about profitability reduces the incentive to produce and invest.

Given the negative consequences of high inflation, there is a broadly held view that the benefits of reducing it outweigh any potential costs. Baker did not specify the level at which he

and his Treasury colleagues considered inflation to be "high", but in keeping with previous work we use the following definitions. High inflation is annual consumer price index (CPI) inflation that is 40 percent or more; moderate inflation is less than 40 percent but greater than or equal to 10 percent; low inflation is less than 10 percent (Dornbusch and Fischer 1993; Fischer 1993; Easterly 1996; Bruno and Easterly 1998). We use these definitions to determine a given EMDE's stabilization year in the following manner.

First, we download the country's annual rates of CPI inflation, construct a time series of its three-year moving average of CPI inflation, and classify the country as having high, moderate, or low inflation at the start of the three-year moving average. Second, we graph the moving average and, starting from the initial year of the series, identify the first instance in which the country experiences a level of inflation that shifts its classification into the next lowest group (e.g., from "moderate" to "low", or from "high" to "moderate") for five or more consecutive years. We define the country's "stabilization year" as the peak-inflation year identified by our procedure.

Finally, we classify each country's stabilization episode as "high" if the stabilization began from an inflation peak that was "high", and "moderate" if its stabilization episode began from a peak that was "moderate". Our procedure yields 15 "high" and 23 "moderate" EMDEinflation-stabilization episodes. There are two reasons why the total number of stabilization episodes, 38, is less than the total number of EMDEs, 155. First, some countries never stabilized. Second, because we seek to examine the growth rate of real GDP in the decade before and after stabilization, we dropped countries for a lack of data.

For the 38 inflation stabilization episodes identified, Table 1 provides two panels, A and B, that describe the data. Panel A summarizes the high inflation episodes, Panel B the moderate

inflation ones. Within each panel, the episodes are grouped according to the geographic region in which they occurred: Africa, Asia, Latin America and the Caribbean, and Eastern Europe. Within each grouping, the first column lists the names of the countries; the second column provides the year in which the country's stabilization began; the third column gives the level of inflation in the country in the year stabilization began. For each region, the bottom rows of each panel provide the average (median) stabilization year and the number of countries in each region. When it comes to stabilizing high inflation, the average (median) year of stabilization across all regions is 1991 (1992), and Latin America has the greatest frequency, with 11 of the 15 episodes. For stabilizing moderate inflation: Africa is the epicenter with 11 of the 23 episodes, the average (median) stabilization year is 1992 (1995); and it is notable that Asian countries—particularly Korea in 1980 and Thailand in 1976—stabilized much earlier than the rest of the world.

Moving from tables to time series, Figure 3 plots, in event time, the average growth rate of real GDP in the 38 inflation-stabilization episodes. Acknowledging that there were concurrent events that temper interpretation of the graph, the average annual growth rate of real GDP ten years after the onset of stabilization is 3.23 percent versus 1.91 percent in the ten years prior, and twenty-four of the 38 countries in the sample have a post-stabilization growth rate of GDP that is higher than their pre-stabilization growth rate.

Consistent with previous work on the costs and benefits of stabilization, the change in the post-stabilization trajectory of real GDP growth is larger in the aftermath of stabilizing high inflation than it is in the case of stabilizing moderate inflation (Easterly 1996; Henry 2002). For the "high" episodes, the average annual growth rate of GDP rises from 1.69 percent prior to stabilization to 3.89 percent after—an increase of 2.2 percentage points per year—and 12 of 15 countries have a post-stabilization growth rate that is higher than their pre-stabilization growth

rate. The average annual growth rate of GDP also rises for the "moderate" episodes—from 2.06 percent to 2.80 percent—but the increase of 0.74 percentage points is one-third the size of that in the "high" episodes, and the pattern of increase is less consistent, with 12 of 23 countries having post-stabilization growth that exceeds pre-stabilization growth.

Because stable and predictable inflation increases the informativeness of prices and improves the efficiency of resource allocation, there is broad agreement that stabilizing inflation—and therefore the macroeconomic environment more generally—is a necessary condition for a country to maximize the benefits of opening up its economy to trade and capital flows from the rest of the world (Fischer 1986, 1987; Matthieson and McKinnon 1981; McKinnon 1984; Michalopolous 1987; Sachs 1988). There was considerably less agreement at the time of Baker's speech, however, about whether the benefits of a country opening up would outweigh the costs (Sachs 1987). Baker and his Treasury colleagues had no such qualms and the Secretary went on to argue that "For those countries which have implemented measures to address the imbalances in their economies, a more comprehensive set of policies can now be put in place…We believe that such institutional and structural policies should include…-market-opening measures to encourage foreign direct investment and capital inflows, as well as to liberalize trade" (Baker 1985, page 209).

#### 3. Liberalization of Trade

Building on the work of Sachs and Warner (1995), Wacziarg and Welch (2008) carefully construct a comprehensive collection of country-specific trade liberalization dates. From Wacziarg and Welch's list of 98 advanced and developing countries that have liberalized trade, we culled the dates of the 72 countries in their sample that classified as developing countries at

the time of Baker's speech. Of these 72 countries, 64 had a sufficiently long time series on real GDP growth to be included in our analysis. Table 2 summarizes these 64 countries and their trade liberalization episodes. Again, we group the episodes according to the geographic region in which they occurred. Within each grouping, the first column lists the names of each country; the second column gives the year in which the country liberalized trade. For each region, the bottom rows of each panel provide the average (median) liberalization year and the number of countries in each region.

From a geographic standpoint, Africa had the largest number of countries that liberalized trade, 26. From a temporal perspective, most countries liberalized trade in the early 1990s, and the average (median) trade liberalization year for the entire sample is 1990 (1991). Korea in 1968, however, stands out as an early liberalizer of trade, just as it did in Table 1 as an early stabilizer of inflation. Korea's early mover status on a subset of economic reforms is somewhat at odds with the narrative of the contrarian Korean growth experience. It is true that "Every major shift in industrial diversification in the 1960s and 1970s was instigated by the state" (Amsden 1989, p.80). But the key input into Korea's economic transformation was less an ideological tilt toward dirigisme as it was a commitment by the state to a pragmatic growth strategy that empowered Korean enterprises to take advantage of the world market. The Korean approach to trade liberalization, along with that of Singapore and Taiwan, contained two critical elements that constitute, as it were, a test of the Baker Hypothesis before Baker.

First, all three countries stabilized inflation before pursuing trade liberalization, and remained vigilant about maintaining macroeconomic stability. Korea, although we do not have the CPI data to detect it in our stabilization algorithm, experienced hyperinflation in the 1950s, during and after the Korean War, that it reduced to moderate inflation by 1960. Like Korea,

Taiwan also experienced hyperinflation—during the Chinese Civil War—but stabilized inflation by 1951 (Sachs, 1987). As for Singapore, with the exception of a temporary spike in 1973 and 1974 due to the oil-price shock, the country has had low inflation since its independence in 1965.

Second, by the end of the 1960s, Korea, Singapore, and Taiwan had all rejected import substitution, and embraced, instead, a sustained commitment to growth strategies that relied on both imports and exports (Commission 2008). While Korea did not fling its economy wide open—the country retained high import tariffs on a wide range of items from agricultural products to computer equipment—the authorities acknowledged the necessity of foreign goods and acted accordingly.

As an important complement to the import liberalization agenda, in 1964 Korean leaders reduced the fiscal deficit and devalued the *won* by almost 100 percent in order to maintain export profitability (Dornbusch and Park 1987). But Korea's approach was not mercantilist. Although Korean exports increased from 4.8 percent of GDP in 1963 to 34 percent in 1980, imports as a percent of GDP rose from 15.9 to 41.4 percent over the same time period (Krueger 1995). Furthermore, Korea's trade balance was negative in both 1963 and 1980. In fact, from 1965 to 1990, Korea's GDP grew by 7.1 percent per year, with the country running trade deficits for almost the entire period. In the case of Taiwan, import tariffs were similarly reduced in a gradual fashion, and a large number of items—intermediate capital inputs, in particular— were removed from the import control list. Like the Korean officials, Taiwan's Nationalist Government also corrected the overvaluation of its currency by: (1) devaluing the New Taiwan Dollar between 50 and 80 percent from 1958-1961, depending on the type of transaction; and (2) unifying the exchange rate in 1963. Finally, Taiwanese officials established export processing zones and passed a law in 1960 to permit direct investment by foreign and overseas Chinese capital (Jao

1976). Like Taiwan, Singapore also chose to encourage foreign direct investment as it switched to export-led growth (Menon 2015).

Turning from East Asia back to the broader developing world, Figure 4 plots, in trade liberalization time, the average growth rate of GDP for the 64 EMDEs. The figure also includes, for comparison, a plot in liberalization time of the average growth rate of GDP for a control group of countries that did not implement trade liberalization during the relevant window. For the 10-year period before trade liberalization the average growth rate of real GDP in EMDEs was 1.72 percent. The average growth rate of real GDP in EMDEs for the 10-year period after liberalization was 4.38 percent. The 2.66 percentage-point increase in the average growth rate of GDP in the EMDEs is not driven by outliers, but rather a consistent pattern of higher growth after opening. Of the 64 countries in the sample, 52 have a post-trade liberalization growth rate that exceeds their country-specific, pre-liberalization average. The growth trajectory of the control group is flat.

#### 4. Liberalization of Capital Flows

Baker's case for developing countries opening to foreign investment hung on standard neoclassical theory in which liberalizing the capital account facilitates a more efficient international allocation of resources and produces a number of beneficial effects. Specifically, savings flow from capital abundant developed countries, where the return on capital is low, to capital-scarce developing countries where the return on capital is high. The flow of savings into the developing countries reduces their cost of capital, triggering a temporary increase in investment and growth that permanently raises their standard of living (Fischer 2003; Krueger 1988; Obstfeld 1998).

Because the national stock market's earnings-to-price ratio—the aggregate earnings yield—is the average cost of equity capital for all publicly traded firms in a country—it provides the broadest visible proxy for the rate of return that owners of capital require to reinvest their profits in the local economy instead of allocating them elsewhere or increasing consumption. In turn, the aggregate earnings yield equals the risk-free interest rate plus the equity-risk premium. In theory, prior to liberalization of the capital account, the risk-free rate for a given country is determined domestically by the local supply of savings and demand for investment; the country's pre-liberalization equity-risk premium is the domestic price of risk (required return per unit of variance) multiplied by the quantity of risk (the variance of aggregate market returns). After liberalization, the country's capital market is integrated with the world capital market; therefore, post liberalization: the risk-free rate is the world interest rate, and the equity premium is the world price of covariance risk multiplied by the covariance of local market returns with global market returns. Since the world risk-free rate is typically lower than the EMDE risk-free rate, and the variance of emerging stock returns is greater than their covariance with world stock returns (Chari and Henry 2004), we expect liberalization to reduce the aggregate earnings yield.

As the variable of interest is the stock market earnings yield, we confront theory with evidence by defining "capital account liberalization" as the first point in time that a government permits foreigners to purchase shares of publicly listed corporations, a seemingly limited form of opening that actually played a significant role in facilitating privatization and foreign direct investment (FDI) as well as enabling flows of portfolio equity. Using dates from Chari, Henry, and Sasson (2012), Figure 5 plots, in liberalization time, the average value of the earnings yield of the 18 EMDEs for which there is information on both liberalization dates and yields. The numbers are annual, and the plot starts at year -5 because of data limitations. Both the average

and median liberalization date is 1989, and there are only 3 countries with data on earnings yields in year -10, none of which are in Latin America, a focal point of Baker's speech. As a point of comparison, and a quasi-control group, Figure 5 also plots the US earnings yield, to which we assign a year "0" of 1989 to match the average liberalization date of the EMDEs.

First, and consistent with theory, Figure 5 indicates that during the process of liberalization and its aftermath the average earnings yield of EMDEs falls sharply and then gradually converges to that of the US. On impact, that is between year -1 and year 0, the average EMDE earnings yield falls from 13.3 percent to 8.0 percent, a drop of 530 basis points in a single year. This average is not the result of a few outliers, but instead a consistent drop in the cost of capital. There are only 4 countries that do not, on impact, experience a fall in their earnings yield. The US earnings yield also falls during the liberalization window, but by a smaller amount, 210 basis points from 8.6 percent to 6.5 percent. The observation that capital account liberalization shrinks the differential in EMDE-US earnings yields by 320 basis points, and that the gap continues to narrow in the aftermath of liberalization—converging to zero in year 5— provides empirical support for the capital market liberalization component of the Baker Hypothesis.

Second, except for the rise in year 8 associated with the 1997-98 Asian Financial Crisis, the fall in EMDE earnings yields appears to be permanent. The average yield for the 18 countries in the five years prior to liberalization, 12.7 percent, drops to an average of 7.1 percent in the ten years after liberalization—a decrease of 560 basis points. In the case of the US, the average earnings yield is also lower in the post-liberalization period than it was in the pre-liberalization period—4.7 percent versus 7.9 percent—but the decline in the average EMDE yield is 240 basis points larger than that of the US. As in the case of the on-impact change in yields, the pattern of

a longer-run post liberalization cost of capital that is lower than the pre-liberalization cost of equity capital is also extremely consistent. Of the 18 countries, there are only 2 in which the post-liberalization cost of equity capital is not lower than the pre-liberalization cost of equity capital, and in both of those countries the cost of capital is unchanged.

Space limitations do not permit panel regressions to address questions about reverse causality and statistical significance, but Figure 5 stands up to empirical scrutiny (Henry 2000; Stulz 2005). As far as economic significance is concerned, the fall in the required rate of return on equity capital after the onset of reforms in the 1990s provides a plausible, if admittedly oversimplified, explanation of the growth acceleration that took hold in the developing world after 1994. By reducing inflation to provide stability and reduce uncertainty, as well as opening the economy to increase the supply of savings and allow greater diversification of risk, the combination of stabilization and capital account liberalization reduced the cost of equity capital in EMDEs. By tilting domestic output in the direction of comparative advantage and raising productivity, trade liberalization raised the rate of return on investing in capital. Falling costs of capital in conjunction with higher prospective returns to property, plant, and equipment provided a strong incentive to increase investment, and many countries in the developing world did, in fact, experience higher rates of investment, wages, and GDP growth following major reforms (Chari, Henry, and Sasson 2012; Chari and Henry 2008; Henry 2007)

In addition to giving EMDEs access to a larger pool of savings, opening their equity markets to foreigners enabled developing countries to reduce their reliance on debt, which requires payments that are invariant to the borrower's circumstances, and resort to FDI and portfolio equity as alternative sources of capital. Baker's speech mentioned the benefits of foreign equity financing as a complement to debt (Baker 1985, p. 210), but his remarks did not

address a critical source of debt bias in the international financial system: implicit subsidies to suppliers of debt capital. G-7 lenders to emerging market countries can resort to G-7 courts in the event of debt disputes, but there is no such recourse for G-7 holders of emerging market equity (see Rogoff 1999). Failure to address the debt bias left EMDEs vulnerable, in the future, to the excessive reliance on leverage that lay at heart of the crisis Baker sought to resolve. In particular, short-term, dollar-denominated debt was the proximate cause of both the 1994 Mexican Crisis and the 1997-98 Asian Crisis (Feldstein 2002).

The reality that neither the Mexican, Asian, or any other emerging market crisis was caused by the liberalization of portfolio equity flows underscores an instructive irony. The aversion of developing country leaders in the 1970s to allow foreigners to purchase shares in their countries' corporations created an excessive reliance on leverage that led to a debt crisis that left them little choice but to open equity markets to facilitate FDI and a wave of privatizations that began in Latin America and spread to Eastern Europe.

#### 5. Privatization of State-Owned Enterprises

With the sale of British Telecom by the Thatcher government in 1984, the term "privatization" entered the everyday lexicon of modern economics, but in the aftermath of Baker's speech, the trend of selling state-owned-enterprises (SOEs) spread to the developing world. Proponents of privatization posit at least three ways in which it can raise welfare. First, by formally establishing property rights and making owners and managers accountable for profits and losses, the reallocation of assets from the public to the private sector can increase the operating efficiency and financial performance of firms previously owned by the state. Second, if privatization also induces entry and increases competition, it can increase consumer surplus and

the overall quality of goods. Third, for a given level of tax revenue, selling loss-making enterprises reduces the size of the government's deficit, frees up resources for investment in public goods, and generates revenues that can be used to pay down debt.

In the case of Latin America, fiscal constraints were a driving factor behind privatization. For years prior to Mexico's historic default in August of 1982, loss-making SOEs in countries across Latin America contributed to chronic budget deficits that were the root cause of the region's debt and inflation crises, and the easing of restrictions on foreign ownership of domestic equity in the late 1980s and early 1990s facilitated the stock market sale of SOEs that were a drain on public finances. For example, shares of YPF, the Argentine national oil company, were divested on the New York Stock Exchange in 1993; Brazil conducted equity sales in electricity, steel, and telecoms in 1997.

Because privatization is generally implemented at the level of the firm rather than the macroeconomy, evaluating its impact on economic growth is more nuanced than in the case of stabilization and liberalization. One exception, however, was the economies of Eastern Europe and the former Soviet Union, where the massive scale of the privatization efforts effectively amounted to an aggregate shock. Given the scale and scope of the shift from state to market production in these countries following the fall of the Berlin Wall, they provide an ideal setting in which to evaluate whether privatization generates aggregate efficiency gains.

Figure 6 indicates that in the 12 transition economies of Central and Eastern Europe (CEEE) and the Commonwealth of Independent States (CIS) that replaced the Soviet Union, the average private sector share of GDP rose from 13 percent in 1990 to 65 percent in 1998. While privatization significantly increased the role of the private sector in Eastern Europe, the initial years of privatization were accompanied by deep recessions in Poland, Hungary, Romania, the

Czech Republic, Slovakia, and the Former Soviet Union due to the massive disruptions that ensued during the transition from state to market (Blanchard and Kremer 1998; Estrin, Hanousek, Kocenda, and Svejnar 2009; Fischer 1992). For example, in 1991 the economies of Poland, Romania, and the Czech Republic contracted by an average of 10.5 percent. Between 1998 and 2007, however, these countries were also among the fastest growing economies in Europe. The average annual growth rates during this period were: 3.7 percent in the Czech Republic and Hungary, 4.3 percent in Poland, 4.4 percent in Romania, 5.9 percent in the Russian Federation, and 5 percent in Slovakia.

By and large, the macroeconomic evidence suggests that post-communist privatization efforts accompanied by complementary reforms may have had a positive effect on the long-run level of aggregate output, but the effects vary in accordance with: (1) the speed of implementation (shock therapy versus gradualism); (2) whether ownership was subsequently dispersed or concentrated; and (3) whether the new owners of the enterprise were foreigners or domestic residents. Sale to foreign owners primarily led to positive effects on the level of total factor productivity, firm revenues, labor productivity, employment, and wages. Sale to domestic residents, on the other hand, resulted in weaker or categorically negative effects (Estrin, Hanousek, Kocenda, and Svejnar 2009).

There are many reasons for the varied record of privatization across space and time. The extent to which privatization is expected to raise efficiency is complicated, nuanced, and context specific. The design of privatization programs appears paramount in putting into place the foundation for subsequent economic progress, and the mode of privatization therefore matters. Rapid privatization in Russia—especially of SOEs in oil, natural gas, and minerals—generally led to inefficiencies and corruption. Gradual divestment in the Czech Republic, Poland, Slovakia,

and Slovenia, was more positive. Corporate governance and institutional frameworks are also important determinants of whether the transfer of ownership to private hands and later restructurings deliver the desired productivity gains.

Turning from macro to micro data, and moving beyond Eastern Europe and the former Soviet Union, reveals more definitive results. There are a range of studies of the financial and operating performance of firms before and after privatization that employ comprehensive data on manufacturing firms in Africa, Asia, and Latin America in addition to the transition economies. Following privatization, real sales, operating efficiency, profitability, capital spending, and dividend payments all show significant increases alongside declining leverage (Megginson and Netter 2001; Boubakri and Cossett 1998). In many cases, improvements in profitability following privatization were not accompanied by layoffs or a decline in worker compensation. Fears of employment losses also appear exaggerated, as a significant fraction of privatized firms actually employ more workers (Megginson and Netter, 2001; Gupta, 2005; Estrin et. al., 2009). The caveat in all of this, of course, is that if governments systematically privatize better firms, selection bias may lead to erroneous attribution of improved performance to the merits of private ownership (Gupta, Ham and Svejnar, 2008).

Another privatization concern stems from evidence, in a sample of privatized firms in 41 emerging and developed countries, that ownership becomes more concentrated in the two decades following divestment (Boubakri et al. 2005). Increased concentration highlights the reality that improved operating performance does not necessarily imply positive-sum outcomes. Indeed, given the rents generated in some cases for the lucky few who were able to acquire state assets, significant controversy surrounds the question of increased market power rather than broad-based welfare gains following privatization.

Concerns about levels of rents and ownership concentration were flagged early on during privatization efforts in Eastern Europe. Famous examples include small groups of oligarchs who managed to concentrate power quickly and accumulate wealth, tainting the reputations of privatization programs through indictments of corruption and cronyism (Roland, 2008). Measures to minimize concentration included calls to incentivize divesture commissions to perform break-ups in industries where there were concerns about anti-competitive behavior, and recommendations to perform market structure interventions to prevent collusion before divestiture (Tirole, 1991). But privatization critics argue that neither public nor private provision can fully resolve the difficult incentive problems and the choice simply depends on the transaction costs associated with future public or private interventions (Sappington and Stiglitz 1987). While the benefits of privatizing competitive industries are less controversial, on balance, state-owned natural monopolies may be preferable if they mitigate regressive redistributive effects.

Finally, an under-appreciated nuance of ownership concentration is that whether under state or private control, ownership concentration and regulatory capture can delay or stall other reforms such as the liberalization of FDI. Evidence suggests that the propensity to open up industries to foreign investment is inversely related to industry concentration (Chari and Gupta, 2008). Efficiency gains are compromised when reform movements are highjacked by special interests suggesting that the political economy of privatization has significant implications for efficiency.

## 6. Resistance and Resentment

While the data on economic outcomes speak clearly in retrospect, the path to meaningful reforms that brought them about was slow, rocky, and non-linear, because Baker failed to say that his speech provided a compass not a map. Postulating that developing countries would grow faster if they stabilized and traded with the rest of the world was one thing. Charting a course from the universe of potential policy changes he described to higher standards of living was quite another. The second point required, for each nation, a sustained commitment to a pragmatic growth strategy, consisting of an optimal mix of country-specific, efficiency-enhancing policy changes.

Efficiency-enhancing policy changes involve difficult adjustments. In democratic settings, enough of those who lose from the changes must be persuaded to back them if the reform process is to be sustained. Therefore, in addition to strategic knowledge about the benefits that such policy changes could bring, successful reform requires tactical knowledge—and bargaining chips. Said differently, "...the economic policies that lead to debt difficulties (and those that lead to rapid growth) are intensely political...the international community has thus far failed to find techniques to reward adherence to altered policy packages over a sustained period...If one were to identify one desirable type of financing facility, it would... simultaneously increase the credibility of the program, serve as an additional inducement to undertake appropriate reform measures, and overcome debt overhang." Krueger (1988).

Baker's official three-step plan for bringing about reform stumbled, in large part, because it rejected Krueger's point about debt overhang. Under the first step of the Baker Plan, leaders had to implement reforms to maintain access to official lending from the IMF and World Bank. Second, their countries would start growing as a result of the first step. Third, private creditors (the commercial banks) would voluntarily resume lending because of the second step. Baker did not ask the banks to write down debt to eliminate overhang and to hold them accountable for extending ill-advised loans in the past. Indeed, he explicitly and publicly opposed any form of debt relief.<sup>1</sup>

Meaningful changes took place in the immediate aftermath of Baker's speech (Williamson 2004). For example, in 1986 the Philippines stabilized and Colombia and Costa Rica liberalized trade. And a number of countries did enough to retain access to IMF and World Bank money. But without debt relief, not enough leaders had the political capital they needed to drive sustained economic transformation. A brief overview of reform dates illustrates the point. The average stabilization year was 1992—seven years after Baker's speech—and the average trade liberalization year was 1990.

In order to accelerate the reform process, In May of 1989 Nicholas F. Brady, Baker's successor at the US Treasury, announced a new financing facility. In return for countries agreeing to implement and sustain certain economic policy changes first emphasized by Baker, countries were offered debt relief that would eliminate debt overhang and clear the way for new, profitable private lending. Once countries managed to negotiate an agreement, their implementation of reforms under the Brady Plan was swift. For the 16 countries that eventually received debt relief, the average year of reaching a Brady agreement was 1992—the same as their average stabilization year, and two years after their average trade liberalization date.

Accomplishments of the Brady Plan notwithstanding, Baker's uneven treatment of the debt overhang problem had lasting ramifications. Specifically, Baker's insistence that economic

<sup>&</sup>lt;sup>1</sup> See Arslanalp and Henry (2006) for documentation of Baker's opposition to debt relief.

restructuring take place without the banks accepting any responsibility left the leaders of many developing countries in a politically untenable position and ignited a firestorm of criticisms from multiple sources that were united by a theme with enduring resonance. Washington, Wall Street, and the leaders of the international financial system resolved a banking crisis by driving through policy changes that hurt the poor and helped the bankers.

## 7. Conclusion

From 30,000 feet, the economic performance of formerly Third World countries in the immediate aftermath of reforms speaks for itself, even as there were important regional differences in outcomes (Coulibaly and Okonjo-Iweala 2020; Goldfajn, Martinez, and Valdes 2020), and some of the reforms have since stalled or been reversed. Economic efficiency is not a sufficient condition for a flourishing society, but it is absolutely necessary for sustainable and inclusive growth that allows an increasing fraction of a country's population to have choices and opportunity, even as its leaders need to recognize the urgency for actions to mitigate the impact of growth on climate change and the environment.

In the absence of exogenous shocks, economic activity does not implode in countries with low inflation and modest debt that export goods they produce efficiently while importing those that they do not. As the fortunes of nations ebb and flow, it is important to remember these realities and to distinguish between cycles and trends. Increasing and legitimate discontent over rising inequality in the present moment may overshadow one of the most important stories about the world economy since the end of the Second World War, even as it continues to unfold.

Certain economic policy reforms implemented by EMDEs have significantly improved their economic performance, lifting hundreds of millions of people out of poverty with positive attendant consequences for health and life expectancy. The hard-won economic successes of the past three decades underscore the benefits of policymakers finding the will to meaningfully and constructively address the redistributive consequences of globalization in order to salvage the prospect of continued catch-up growth by EMDEs and positive sum outcomes for both developed and developing economies alike.

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Figure 1. Inflation In EMDEs Fell Permanently In 1994.





Figure 2. EMDEs Grew Faster After 1994. Rich Countries Did Not.



Figure 3. EMDEs Grew Faster After They Stabilized Inflation.



Figure 4. EMDEs Grew Faster After They Liberalized Trade.



Figure 5. EMDEs' Cost of Equity Capital Fell After They Opened Their Stock Markets to Foreigners.



Figure 6. In Transition Economies, The Private Sector's Output As a Share of GDP Rose After Privatization.

	<u>Africa</u>	Africa		<u>Asia</u>			Latin America		Eastern Europe		
<u>Country</u>	Year	Inflation	<u>Country</u>	Year	Inflation	<u>Country</u>	<u>Year</u>	Inflation	<u>Country</u>	Year	Inflation
Congo, Dem. Rep.	1995	9963.07	Syria	1989	43.37	Argentina	1991	84	Poland	1992	296.40
						Bolivia Brazil Chile Costa Rica Dominican Republic Ecuador Jamaica Peru Suriname	1987 1995 1976 1984 1992 2002 1994 1991 2002	4435.78 1651.74 410.76 53.27 46.07 62 50.15 3849.12 65.59	Turkey	1997	91.58
Mean	1995	9963.07		1989	43.37	Oruguay	1992	98.32		1995	194
Median	1995	9963.07		1989	43.37		1992	84		1995	194
Number of Countries	1			1			11			2	

# Table 1. The Frequency of Stabilization Episodes Varies by Geography and Was Concentrated in the 1990s. Panel A: High Inflation.

	Africa		Asia			Latin America			Eastern Europe		
Country	Year	Inflation	Country	Year	Inflation	Country	Year	Inflation	Country	Year	Inflation
Algeria	1995	27.09	Korea	1981	22.79	El Salvador	1988	26.38	Hungary	1993	28.95
Burundi	1998	25.60	Philippines	1986	27.83	Guatemala	1992	28.59			
Gabon	1997	15.48	Thailand	1976	15.05	Haiti	1996	32.22			
Gambia	1988	32.80				Haiti	2006	21.23			
Kenya	1995	34.04				Honduras	1997	25.02			
Madagascar	1997	35.93				Paraguay	1992	29.30			
Mauritius	1982	23.64				Mexico	1998	30			
Niger	1997	17.30				Trinidad and	1982	15.51			
						Tobago					
Senegal	1997	14.30									
South Africa	988	17.04									
Togo	1997	20.09									
Mean	1994	23.94		1981	18.31		1994	26.03		1993	28.95
Median	1997	23.64		1980	15.05		1994	27.48		1993	28.95
Number of Countries											
	11			3			8			1	

Table 1. The Frequency of Stabilization Episodes Varies by Geography and Was Concentrated in the 1990s. Panel B: Moderate Inflation.

Africa		<u>Asia</u>		Latin America	Eastern Europe		
<u>Country</u>	Year	<u>Country</u>	Year	<u>Country</u>	<u>Year</u>	<u>Country</u>	<u>Year</u>
Benin	1990	Bangladesh	1996	Argentina	1991	Albania	1992
Botswana	1979	Jordan	1965	Bolivia	1985	Bulgaria	1991
Burkina Faso	1998	Korea	1968	Brazil	1990	Georgia	1996
Burundi	1999	Nepal	1991	Chile	1976	Hungary	1990
Cabo Verde	1991	Pakistan	2001	Colombia	1986	Montenegro	2001
Cameroon	1993	Philippines	1988	Costa Rica	1986	Poland	1990
Cote d'Ivore	1994	Sri Lanka	1991	Dominican Republic	1992	Romania	1992
Egypt	1995	Tajikistan	1996	Ecuador	1991	Serbia	2001
Ethiopia	1996			El Salvador	1989	Turkey	1989
Gambia	1985			Guatemala	1988		
Ghana	1985			Guyana	1988		
Guinea	1986			Honduras	1991		
Guinea-Bissau	1987			Jamaica	1989		
Kenya	1993			Mexico	1986		
Madagascar	1996			Nicaragua	1991		
Mali	1988			Panama	1996		
Mauritania	1995			Paraguay	1989		
Mauritius	1968			Peru	1991		
Morocco	1984			Trinidad and Tobago	1992		
Mozambique	1995			Uruguay	1990		
Niger	1994			Venezuela	1996		
Sierra Leone	2001						
South Africa	1991						
Tanzania	1995						
Tunisia	1989						
Uganda	1988						
Mean	1991		1987		1989		1994
Median	1992		1991		1990		1992
Number of Countries	26		8		21		9

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Table 2. The Frequency of Trade Liberalization Episodes Varies by Geography and Was Concentrated in the 1990s.