

# The Baker Hypothesis: Stabilization, Structural Reforms, and Economic Growth

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**D**uring the late 1970s and early 1980s, developing country governments from Kingston to Kuala Lumpur ran large fiscal deficits, causing their countries' stock of public debt to increase faster than GDP. As debt-to-GDP ratios breached critical thresholds and real interest rates for borrowing in US dollars rose, access to foreign financing ceased. When Mexico defaulted on its external obligations in 1982, precipitating a global debt crisis, 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 approaching 40 percent per year, with some countries spiking into hyperinflation.

On October 8, 1985, then-Secretary of the US Treasury, James A. Baker III, acting on a body of accumulated but untested knowledge about the potential benefits of economic policy reform whose origins lay with Krueger (1974), Balassa (1977), and others, unveiled a “Program for Sustained Growth” at the meetings of the International Monetary Fund (IMF) and World Bank in Seoul, South Korea. Baker (1985, p 207) said: “If the debt problem is going to be solved, there must be . . . First and foremost, the adoption by principal debtor countries of comprehensive

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macroeconomic and structural policies, supported by the international institutions, to promote growth and balance of payments adjustment, and to reduce inflation.” He enumerated a list of economic reforms—inflation stabilization, trade liberalization, greater openness to foreign investment, and privatization—that he urged “Third World” leaders to adopt, both as a way to reestablish their ability to borrow in international markets and also to enable their countries to grow again. These policies were later codified and branded “the Washington Consensus” by Williamson (1990).

Baker’s speech unleashed a contentious and still unresolved debate about the economic impact of his recommended reforms. Opponents argue that the Washington Consensus failed (Rodrik 2006), and it has been disparagingly labeled as “neoliberalism” by others (for example, Chomsky 1999; Stiglitz 2002). Proponents contend either that reforms have been found difficult and left untried (Krueger 2004; Gil Diaz 2003), or that the results have been positive if comparatively modest (Easterly 2019; Grier and Grier 2021).

The persistence of this dispute is puzzling, given that Baker’s speech would seem to constitute a testable claim that can be confronted with data: “If developing countries implement this set of reforms, then their standards of living will rise at a faster rate than they did before the implementation.” The most common approach to evaluating this claim, however, has involved regressions with long-run growth rates (often measured by 30-year averages) as the dependent variable, and a dummy variable that indicates the presence or absence of certain policy reforms during the entire period over which growth is measured as the key explanatory variable (for example, openness to trade as in Rodríguez and Rodrik 2000). Cross-sectional regressions, however, provide a weak test of the hypothesis in question. Regressing countries’ average long-run growth rates on policy-related dummy variables that are either “on” or “off” asks the following question: Is it the case that countries with low inflation, free trade, and liberalized capital accounts have higher long-run growth rates than countries with high inflation, restricted trade, and closed capital accounts?

The problem with this question is that a Solow-style (1956) model does not predict that countries that have reformed will on average have faster growth than countries that have not. What the model does predict—and the Baker Hypothesis implicitly claims—is the following: If a given country implements and maintains certain economic reforms, then its gross domestic product (GDP) will grow faster after 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. Once the transition is over, the country, now at a permanently higher level of GDP, will revert to its pre-reform, steady state rate of growth. Although such a transition can take decades to complete, the calculations in Henry (2007, pp. 898–899) demonstrate (in the context of capital account liberalization) that the average deviation of GDP growth from its steady-state value in the first five years after the policy change is 2.5 times larger than the average deviation in years six through 30. In addition, given the magnitude of standard errors associated with cross-sectional regression estimates, the average growth deviation during the first five years of transition will be statistically as well

as economically significant, while the average deviation in years six through 30 will not. In an example in the same spirit, Easterly (1996) illustrates that cross-sectional regressions of inflation on growth have little power to discern the true impact of stabilizing inflation. Finally, Wacziarg and Welch (2008) show that the positive relationship between growth and open trade regimes documented by Sachs and Warner (1995) is economically larger and statistically more robust when, as suggested by Henry (2007), one uses a panel data, event-study approach to test explicitly for the presence of a temporary growth acceleration, both on impact and in the immediate aftermath of major policy changes.

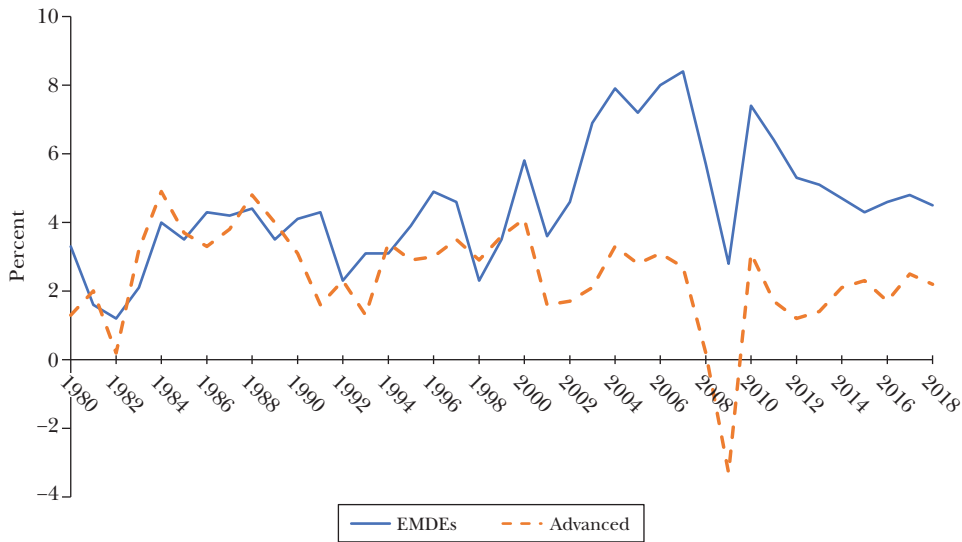
This article takes seriously the time series, country-specific predictions of the Solow model. It does so by focusing on the widespread, if uneven, adoption of a set of policy reforms—commonly referred to as the “Washington Consensus mantra of stabilize, liberalize, and privatize” (Gertz and Kharas 2019)—by emerging and developing economies in the late 1980s and into the early-to-mid 1990s. In particular, the key policies are 1) stabilization of inflation; 2) freer trade; 3) increased openness to flows of foreign investment; and 4) an expanded role of the market in producing and allocating goods and services through privatization. Looking at these changes, in turn, provides a set of policy experiments that enable us to examine whether the time paths of GDP growth associated with these reforms refute or support Baker’s implicit “if-then” claim.

## Setting the Stage

Figure 1 uses the IMF’s weighted average of real GDP growth for all emerging and developing economies, as well as that of all advanced countries, to set the stage for the country-specific discussion to follow.<sup>1</sup> Through the 1980s, the average growth rate of real GDP for the emerging and developing economies was quite similar to that of the advanced economies even though theory predicts, all else equal, that the emerging and developing economies should have been experiencing catch-up growth and therefore expanding more rapidly than the advanced economies. Because of their problems with debt and inflation, however, all else was not equal in the emerging and developing economies until many of their leaders initiated economic reforms. The reform process that had been set in motion by Baker’s 1985 speech was pushed forward by the fall of the Berlin Wall in 1989 and was reinforced by the implementation of debt relief agreements under the Brady Plan in the early 1990s (Williamson 2004). After peaking in 1993, the dramatic and permanent fall in the IMF’s weighted average of inflation in the emerging and developing economies, shown in Figure 2, provides a salient indicator of the meaningful, if imperfect, shift that took hold in the economic policies and priorities of much of the developing world following the Brady Plan debt relief agreements.

<sup>1</sup>One country in our sample, South Korea, would have been classified as an emerging and developing economy in 1980 but is now “advanced.”

*Figure 1*  
**Emerging and Developing Economies Grew Faster after They Implemented Reforms**



*Note:* Figure 1 presents the IMF’s weighted average of real GDP growth for all emerging and developing economies, as well as that of all advanced economies for comparison. EMDE stands for “emerging market and developing economies.” Details of data and calculations are in the online Appendix available with this article at the *JEP* website.

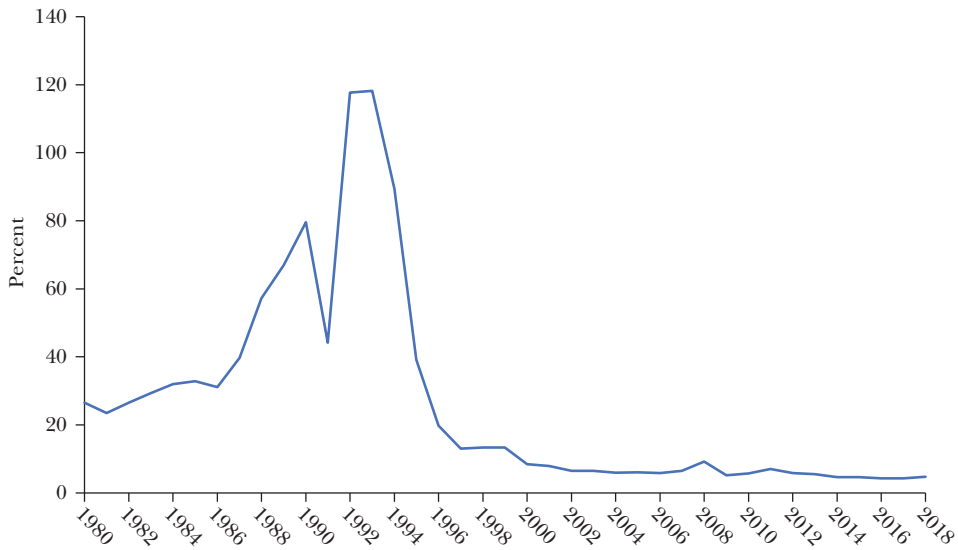
As countries stabilized inflation and pursued structural reforms, catch-up growth ensued. Going back to Figure 1, and taking 1993 as a proxy date for the turnaround, we calculate that from 1994 to 2018, real GDP in the emerging and developing economies grew by an average of 5.2 percent per year versus the 3.3 percent rate at which it expanded from 1980 to 1993.<sup>2</sup> For a country whose population increases at the rate of 1 percent per year, 3.3 percent GDP growth means that its per capita income doubles once every 30 years; with 5.2 percent GDP growth, the same country’s standard of living doubles in just 16 years. The growth acceleration in emerging and developing economies was not driven by China. Indeed, China’s average rate of growth actually slowed over the period in question—from 9.9 percent between 1980 and 1993 to 9.6 percent from 1994 to 2018. Thus, the 1.9 percentage-point increase in the average growth rate of emerging and developing economies is not a statistical artifact of China’s economic performance.

Also, contrary to the popular zero-sum media narratives that faster growth in poor countries harms rich countries (summarized in Krugman 1994), there is no evidence that rising standards of living in the emerging and developing economies came at the expense of “first world” prosperity. The advanced countries grew by

<sup>2</sup>Shifting the proxy date for the turnaround by a year or two in either direction has a de minimus impact on our calculation.

Figure 2

**The Timing of the Permanent Fall in Inflation in Emerging and Developing Economies**



Note: Figure 2 shows that after peaking in 1993, there was a dramatic and permanent fall in the IMF's weighted average of inflation in emerging and developing economies. Details of data and calculations in the online Appendix.

2.9 percent per year from 1980 to 1993; from 1994 onward, they continued growing at approximately the same rate (excluding the period of the global financial crisis that originated in the developed world).

The largely unchanged long-term growth performance in rich countries additionally 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 the emerging and developing economies. Population expansion provides one potential alternative explanation to reforms, as vast supplies of low-cost labor in the rural and informal economies of poor countries surely played a role in sustaining the growth process (as in a Lewis-style 1954 growth model). But from 1994 to 2018, there was no change in the demographics of the developing world to suggest that an increase in the growth rate of its working age population was responsible for the growth acceleration. In fact, from 1994 to 2018, the growth rate of the working age population in Asia and Latin America was actually decreasing (and was roughly constant in Africa), even as the growth rate of real GDP for emerging and developing economies was rising.<sup>3</sup>

<sup>3</sup>Non-demographic factors may also explain the growth acceleration in emerging and developing economies. While this essay is not the place for an econometric examination of the extent to which the Baker

Instead, the proximate cause of the growth acceleration in emerging and developing economies was, indeed, the array of country-specific economic reforms pushed forward by the Brady Plan. 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 highly 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.

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. In Baker's (1985) speech, he failed to say that his remarks provided a compass, not a map. Postulating that developing countries would grow faster if they stabilized and traded more 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 step required, for each nation, a sustained commitment to a pragmatic growth strategy, consisting of an optimal mix of country-specific, efficiency-enhancing policy changes (Henry 2013). Indeed, one might say that the empirical success of the Baker Hypothesis, which conjectured what reforms would make economies grow, stands in sharp contrast to the failure of the Baker Plan, which did not articulate a realistic strategy for how leaders could actually bring about the subset of reforms best suited to their countries. 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.

## **Stabilization of Inflation**

The intellectual justification for Baker's (1985) 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. The variability of the aggregate price level matters, because greater variability of inflation increases the likelihood of bouts of high and unexpected inflation (Ha, Kose, and Ohnsorge 2019; IMF 2001). 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, thereby increasing uncertainty about profitability and reducing the incentive to produce and invest (Andrés and Hernando 1999). Because unexpected inflation helps borrowers and hurts lenders, fear of unexpected inflation

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Hypothesis stands up to a range of alternative explanations, the central conclusions about reforms and growth suggested by the figures we show withstand empirical scrutiny elsewhere. For evidence on the impact of stabilization see Easterly (1996) and Henry (2002); on trade liberalization, Wacziarg and Welch (2008), Estevadeordal and Taylor (2013), and Irwin (2019); on capital account liberalization, Henry (2000a), Chari and Henry (2004), Henry (2007), and the references therein.

in non-inflation-indexed environments may discourage lenders from entering into long-term contracts, again with negative attendant consequences for production and investment.

In his 1985 speech, Baker did not specify the level at which he and his US Treasury colleagues considered inflation to be “high,” but in keeping with previous work we define high inflation as annual consumer price index inflation that is 40 percent or more; “moderate” inflation is less than 40 percent but greater than or equal to 10 percent; and “low” inflation is less than 10 percent (Dornbusch and Fischer 1993; Fischer 1993; Easterly 1996; Bruno and Easterly 1998).

Next, we use these definitions to determine the year in which a given country stabilized inflation in the following manner. First, we gather the country’s annual rates of consumer price inflation from World Bank data and construct a time series of its three-year moving average of inflation. Second, starting from the initial year of the series, we classify the country’s level of inflation in accordance with the first instance in which the country experiences high or moderate inflation for five or more consecutive years. Third, we identify when the country’s classification shifts into the next lowest group (for example, from “moderate” to “low,” or from “high” to “moderate”) for five or more consecutive years (again, using a three-year moving average for each year). 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 25 “high” and 28 “moderate” inflation-stabilization episodes in emerging and developing economies, for a total of 53 stabilization episodes. The number of episodes is less than the number of emerging and developing economies listed by the IMF because some countries did not have a stabilization. Also, because we seek to examine the growth rate of real GDP in the decade before and after stabilization, we dropped 38 countries for lack of data.<sup>4</sup>

Table 1 summarizes the 53 inflation stabilization episodes. Panel A indicates that when it comes to stabilizing high inflation, the average year of stabilization across all regions is 1992. Among regions, Latin America has the greatest frequency of high inflation stabilizations, with 11 of the 25 episodes and an average peak inflation rate of almost 1,000 percent. There were eight high inflation episodes in Africa. For stabilizations of moderate inflation, as shown in Panel B, Africa contains 14 of the 27 episodes, the average stabilization year is 1990 (the median is 1989), and the average level of moderate inflation at the peak was 22 percent. In Latin America, the seven cases of moderate inflation peaked at an average rate of 27 percent in 1996. Turning to Asia, it is notable that South Korea stabilized moderate inflation in 1982, much earlier than the vast majority of the other inflation stabilization episodes in emerging and developing economies.

<sup>4</sup>The online Appendix available with this paper at the *JEP* website lists the 38 countries we dropped as well as all of those classified as emerging and developing economies by the IMF.

*Table 1*  
**Inflation Stabilization Episodes by Geography**

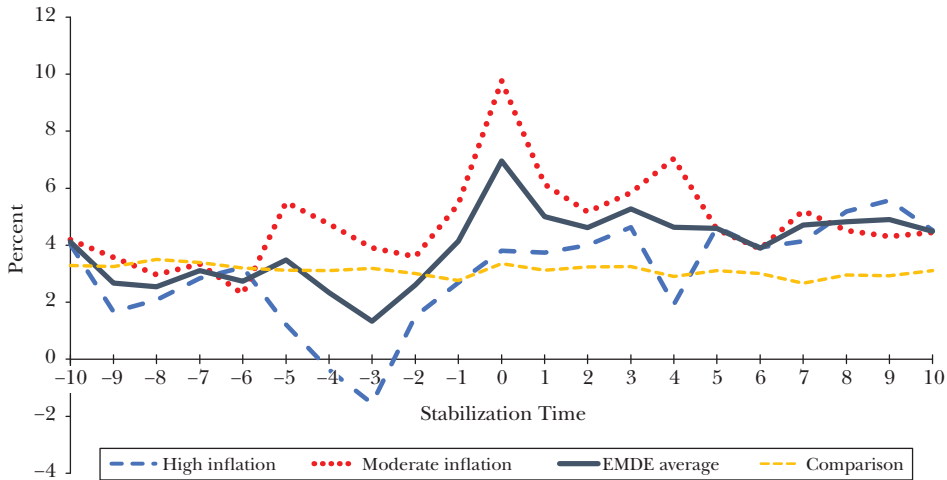
<i>Africa</i>		<i>Asia</i>		<i>Latin America</i>		<i>Eastern Europe</i>	
<i>Country (Year)</i>	<i>Inflation (%)</i>	<i>Country (Year)</i>	<i>Inflation (%)</i>	<i>Country (Year)</i>	<i>Inflation (%)</i>	<i>Country (Year)</i>	<i>Inflation (%)</i>
<i>Panel A. High inflation</i>							
Angola (1997)	2,587	Lao PDR (2000)	81	Bolivia (1987)	4,435	Albania (1995)	111
Congo, Dem. Rep. (1995)	9,963	Mongolia (1996)	118	Brazil (1995)	1,651	Bulgaria (1998)	414
Ghana (1984)	87	Syrian Arab Rep. (1989)	43	Chile (1976)	410		
Guinea-Bissau (1994)	58	Turkey (1997)	85	Costa Rica (1984)	53		
Malawi (1997)	51			Dominican Republic (1992)	46		
Nigeria (1996)	62			Ecuador (2002)	62		
Sudan (1994)	114			Jamaica (1994)	50		
Zambia (1994)	148			Mexico (1989)	110		
				Peru (1991)	3,849		
				Suriname (2002)	65		
				Uruguay (1992)	98		
Mean (1994)	1,634	Mean (1996)	82	Mean (1991)	984	Mean (1997)	262
Median (1995)	100	Median (1997)	83	Median (1992)	98	Median (1997)	262
Number of countries	8	Number of countries	4	Number of countries	11	Number of countries	2
<i>Panel B. Moderate inflation</i>							
Botswana (1994)	14	Kyrgyz Rep. (2000)	23	Colombia (1993)	28	Papua New Guinea (2001)	14
Cote d'Ivoire (1980)	19	Myanmar (1976)	27	Dominican Republic (2005)	28		
Algeria (1995)	27	Myanmar (1999)	32	Guatemala (1992)	28		
Egypt, Arab Rep. (1989)	20	Pakistan (1976)	23	Haiti (2006)	21		
Gambia, The (1988)	32	Philippines (1992)	14	Honduras (1997)	25		
Equatorial Guinea (1997)	19	Korea (1982)	22	Paraguay (1992)	29		
Kenya (1995)	34			El Salvador (1988)	26		
Kenya (2008)	16						
Rwanda (1976)	23						
Madagascar (1997)	35						
Senegal (1985)	13						
Eswatini (1988)	15						
Seychelles (1975)	21						
South Africa (1988)	17						
Mean (1990)	22	Mean (1988)	24	Mean (1996)	26	Mean (2001)	14
Median (1989)	19	Median (1987)	23	Median (1993)	28	Median (2001)	14
Number of countries	14	Number of countries	6	Number of countries	7	Number of countries	1

*Note:* Table 1 summarizes the 53 inflation stabilization episodes. Panels A and B list “high” and “moderate” inflation countries by world region, the stabilization year, and the peak inflation rate. High inflation is an annual consumer price index inflation that is 40 percent or more; “moderate” inflation is less than 40 percent but greater than or equal to 10 percent; and “low” inflation is less than 10 percent. Using a time series of a three-year moving average of inflation, we classify a country as having high, moderate, or low inflation at the start of the three-year moving average. Starting from the initial year of the series, we identify the first instance in which the country experiences a level of inflation that shifts its classification into the next lowest group (for example, 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. 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 25 “high” and 28 “moderate” inflation-stabilization episodes in emerging and developing economies.



Figure 3

**Emerging and Developing Economies Grew Faster after They Stabilized Inflation**



Note: Figure 3 plots, in event time with the year of inflation stabilization as zero, the average growth rate of real GDP surrounding the 53 country-inflation-stabilization episodes. The figure also includes a plot in stabilization time of the average growth rate of real GDP for a comparison group of countries. For a given emerging market and developing economy (EMDE) inflation stabilization episode (for example, Brazil 1995), the comparison group consists of all countries that meet the World Bank’s income threshold for being classified as “advanced.” We then take as the comparison-group growth series for the given episode, the World Bank’s (weighted) average growth rate of advanced economies for each of the years in the interval  $[-10, 10]$  (e.g., [1983, 2003] for Brazil). Proceeding in identical fashion for each emerging-and-developing-economy episode, we construct 53 series of comparison-group growth rates. The “comparison” line in Figure 3 is the (unweighted) average of these 53 series. The figure also plots the average growth rate of GDP for the “high” and “moderate” inflation stabilization episodes. Details of data and calculations are in the online Appendix.

Figure 3 uses IMF data to plot, in event time with the year of inflation stabilization as zero, the average growth rate of real GDP surrounding the 53 country-inflation-stabilization episodes. The figure also includes a plot in stabilization time of the average growth rate of real GDP for a comparison group of countries. We construct the comparison group as follows. For a given emerging and developing economy inflation stabilization episode (say, Brazil 1995), the comparison group consists of all countries that meet the World Bank’s income threshold for being classified as “advanced.”<sup>5</sup> We then take as the comparison-group growth series for the given episode, the World Bank’s (weighted) average growth rate of advanced economies for each of the years in the interval  $[-10, 10]$  (for

<sup>5</sup>We considered including in the comparison group only those advanced economies that had “low” inflation for at least ten years prior to the year of the emerging and developing economy stabilization episode, but the number of advanced economies across all 53 episodes that did not meet the low-inflation threshold was negligible.

Brazil 1995, this would be the interval [1985, 2005]). Proceeding in identical fashion for each emerging-and-developing-economy episode, we construct 53 series of comparison-group growth rates. The “comparison” line in Figure 3 is the (unweighted) average of these 53 series.

The average annual growth rate of real GDP ten years after the onset of stabilization is 4.9 percent versus 2.9 percent in the ten years prior, 37 of 53 countries have a post-stabilization growth rate of GDP that is higher than their country-specific, pre-stabilization growth rate, and the growth collapse in the years immediately preceding stabilization mirrors the findings of Bruno and Easterly (1998).<sup>6</sup> Consistent with previous work on the costs and benefits of stabilization (Easterly 1996; Henry 2002), the growth increase in the aftermath of stabilizing high inflation is larger than in the case of stabilizing moderate inflation. For the “high” episodes, the average annual growth rate of GDP rises from 1.6 percent prior to stabilization to 4.2 percent after, an increase of 2.6 percentage points per year. Concurrent events temper interpretation of the magnitude of the impact, but the directional effect is robust. Twenty-one of 25 countries have an average post-stabilization rate of growth that exceeds their country-specific, pre-stabilization average, and 21 of 25 countries have a median post-stabilization rate of growth that exceeds their country-specific, pre-stabilization median. The four countries that do not experience an increase in average or median growth after stabilization are Brazil, Guinea Bissau, Jamaica, and Malawi.

The average annual growth rate of GDP also rises for the “moderate” episodes—from 4.05 percent to 5.52 percent—but the increase of 1.47 percentage points is a little less than three-fifths the size of that in the “high” episodes, and the pattern of increase is less consistent. Sixteen of 28 countries have an average post-stabilization rate of growth that exceeds their country-specific, pre-stabilization average, and 16 of 28 countries have a median post-stabilization rate of growth that exceeds their country-specific, pre-stabilization median. The trajectory of the comparison group is flat.

## **Liberalization of Trade**

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; Mathieson and McKinnon 1981; McKinnon 1984; Michalopolous 1987; Sachs 1988). At the time of Baker’s (1985) speech, however, there was considerably less agreement about whether the benefits of a country opening up would outweigh the

<sup>6</sup>For a list of the 37 countries and other details of these calculations, see the online Appendix.

costs (Sachs 1987). Baker (1985) and his Treasury colleagues had no such qualms and Baker (p. 209) argued: “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.”

Wacziarg and Welch (2008, building on Sachs and Warner 1995) carefully construct a comprehensive collection of country-specific trade liberalization dates. From the Wacziarg and Welch list of 98 advanced and developing countries that have liberalized trade, we culled the dates of the 72 countries in their sample that were classified as developing countries at the time of Baker’s (1985) speech. Of these 72 countries, 64 had a sufficiently long time series on real GDP growth to be included in our analysis.<sup>7</sup> Table 2 summarizes these 64 episodes. From a temporal perspective, most countries liberalized trade in the early 1990s, and the average trade liberalization year for the entire sample is 1990 (median of 1991). From a geographic standpoint, Africa had the largest number of countries that liberalized trade, with 26.

Korea in 1968 stands out as an early liberalizer of trade, just as it did as an early stabilizer of inflation. Korea’s early mover status on a subset of structural economic reforms is somewhat at odds with the narrative that places the roots of Korea’s successful growth experience in government interventionism. As Amsden (1989, p. 80) writes: “Every major shift in industrial diversification in the 1960s and 1970s was instigated by the state.” But in our view, the key input into Korea’s economic transformation was less an ideological tilt toward *dirigisme* than it was a commitment by the state to a pragmatic growth strategy that empowered Korean enterprises to become more active and effective participants in 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, Korea, Singapore, and Taiwan all stabilized inflation before pursuing trade liberalization and remained vigilant about maintaining macroeconomic stability. Korea, although we do not have the data on consumer price inflation 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 an import substitution strategy for promoting growth and instead embraced a sustained commitment to growth strategies that relied on both imports and exports

<sup>7</sup>The list of 72 countries and dates, along with more details of the analysis, is available in the online Appendix.

Table 2

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

<i>Africa</i> Country (Year)	<i>Asia</i> Country (Year)	<i>Latin America</i> Country (Year)	<i>Eastern Europe</i> Country (Year)
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'Ivoire (1994)	Sri Lanka (1991)	Dominican Republic (1992)	Romania (1992)
Egypt (1995)	Tajikistan (1996)	Ecuador (1991)	Serbia (2001)
Ethiopia (1996)	Turkey (1989)	El Salvador (1989)	
Gambia (1985)		Guatemala (1988)	
Ghana (1986)		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 (1990)	Mean (1987)	Mean (1989)	Mean (1994)
Median (1991)	Median (1991)	Median (1990)	Median (1992)
Number of countries 26	Number of countries 9	Number of countries 21	Number of countries 8

*Note:* Table 2 summarizes 64 trade liberalization episodes. We use information from Wacziarg and Welch (2008, building on Sachs and Warner 1995) who construct a comprehensive collection of country-specific trade liberalization dates. From the Wacziarg and Welch list of 98 advanced and developing countries that have liberalized trade, we culled the dates of the 72 countries in their sample that were classified as developing countries at the time of Baker's (1985) speech. Of these 72 countries, 64 had a sufficiently long time series on real GDP growth to be included in our analysis.

(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

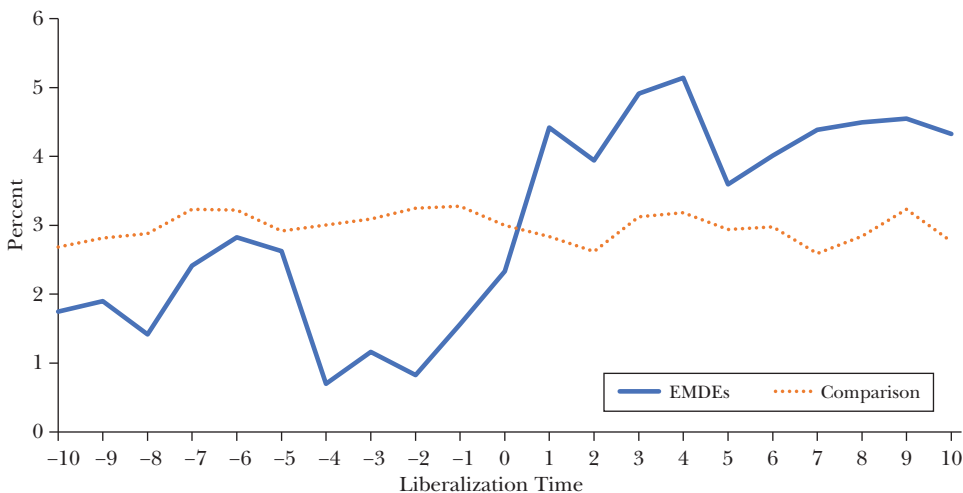
to computer equipment—the authorities acknowledged the necessity of certain imported foreign goods and acted accordingly.

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 increase export profitability (Dornbusch and Park 1987). But Korea's approach was not mercantilist. Although exports rose from 4.8 percent of GDP in 1963 to 34 percent of GDP in 1980, imports increased from 15.9 percent of GDP to 41.4 percent of GDP over the same time period (Krueger 1995, Table 1.4). In other words, while the maxi-devaluation achieved the goal of increasing exports relative to imports—exports rose by a factor of 7.1, imports by a factor of 2.6—it did not undermine the integral role of foreign goods in the country's development. In fact, from 1965 to 1990, Korea's real GDP per capita grew by 7.1 percent per year, with the country running trade deficits for almost the entire period (Krueger 1995, Tables 1.1 and 1.3). In the case of Taiwan, import tariffs were similarly reduced, and a large number of items—intermediate capital inputs, in particular—were removed from the import control list. As in Korea, Taiwanese officials also corrected the overvaluation of its currency. They did this by: 1) devaluing the New Taiwan Dollar by between 50 and 80 percent from 1958–1961, depending on the type of transaction; and 2) unifying the exchange rate in 1963. Taiwanese officials also 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 uses IMF data to plot, in trade liberalization time, the (unweighted) average growth rate of GDP for the 64 emerging and developing economies that undertook trade liberalization. The figure also includes a plot in liberalization time of the growth rate of GDP for a comparison group of countries. We construct the comparison group as follows. For a given emerging-and-developing-economy trade liberalization episode (say, Egypt 1995), the comparison group consists of all advanced economies in the IMF data that, per Wacziarg and Welch (2008), were classified as having “free trade” at least ten years prior to the year of the emerging-and-developing-economy trade liberalization episode. We then use the comparison group of advanced economies to construct the comparison growth series for the given episode as the (unweighted) average rate of growth for each of the years in the interval  $[-10, 10]$  across all advanced economies in the group (say, the interval  $[1985, 2005]$  for Egypt). Proceeding in identical fashion for each emerging-and-developing-economy trade liberalization episode, we construct 64 series of comparison-group growth rates. The line “comparison” in Figure 4 is the unweighted average of these 64 series.

For the 10-year period before trade liberalization, the average growth rate of real GDP in the 64 emerging and developing economies was 1.72 percent. The average growth rate of real GDP in these economies for the 10-year post-liberalization period was 4.38 percent. The 2.66 percentage-point increase in the average growth rate of GDP in the emerging and developing economies, again tempered by concurrent events, is not driven by outliers but rather a consistent pattern of

Figure 4

**Emerging and Developing Economies Grew Faster after They Liberalized Trade**

*Note:* Figure 4 plots in trade liberalization time, the (unweighted) average growth rate of GDP for the 64 emerging market and developing economies (EMDEs) that undertook trade liberalization. The figure also includes a plot in liberalization time of the growth rate of GDP for a comparison group of countries. For a given emerging- and-developing-economy liberalization episode (for example, Egypt 1995), the comparison group consists of all advanced countries in the IMF data that, per Wacziarg and Welch (2008), were classified as having “free trade” at least ten years prior to the year of the emerging-and-developing-economy liberalization episode. We then use the comparison group of advanced countries to construct the comparison growth series for the given episode as the (unweighted) average rate of growth for each of the years in the interval  $[-10, 10]$  across all countries in the group (for example, the interval  $[1985, 2005]$  for Egypt). Proceeding in identical fashion for each emerging-and-developing-economy trade liberalization episode, we construct sixty-four series of comparison-group growth rates. The line “comparison” is the unweighted average of these 64 series. Details of data and calculations in the online Appendix.

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 median post-liberalization growth rate exceeds the country-specific, pre-liberalization median in 53 cases. The trajectory of the comparison group is flat.

### **Liberalization of the Capital Account**

Baker’s (1985) case for developing countries opening to foreign investment rests on standard neoclassical theory, in which liberalizing the capital account facilitates a more efficient international allocation of resources. 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).

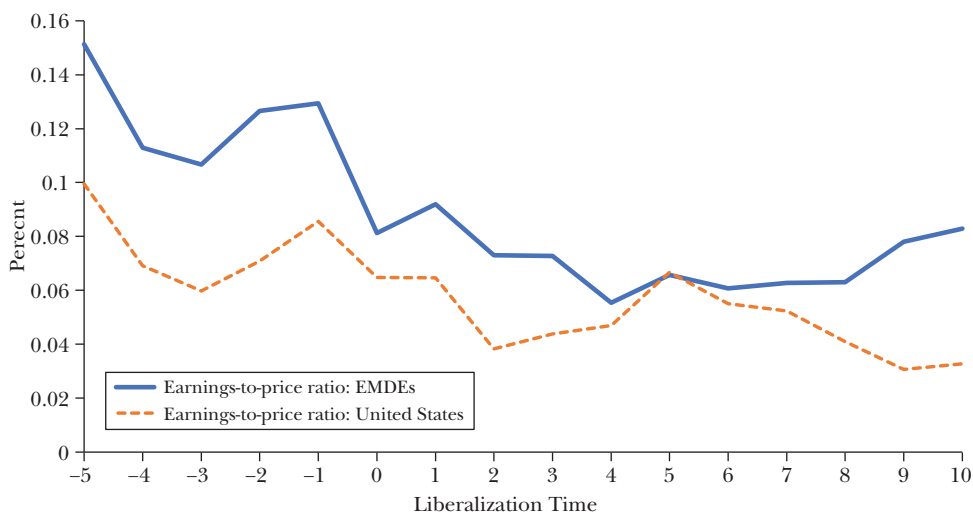
The national stock market's earnings-to-price ratio, the aggregate earnings yield, is the average cost of equity capital for all publicly traded firms in a country. The aggregate earnings yield, therefore, provides the broadest visible proxy for the rate of return that owners of capital require to reinvest 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. Because the world risk-free rate is typically lower than the risk-free rate for emerging and developing economies, and the variance of emerging stock returns is greater than their covariance with world stock returns (Chari and Henry 2004; Stulz 1999), it is reasonable to expect liberalization to reduce the aggregate earnings yield.

We define "capital account liberalization" as the first point in time that a government permits foreigners to purchase shares of publicly listed corporations. This may seem to be a limited form of opening an economy to international capital flows, but the easing of foreign ownership restrictions on domestic stocks, in addition to enabling flows of portfolio equity, played a significant role in facilitating foreign direct investment and privatization (Edwards 1995, chapter 6). Using dates from Chari, Henry, and Sasson (2012), Figure 5 plots, in liberalization time, the average value of the earnings yield of the 18 emerging and developing economies for which there is information on both liberalization dates and the earnings-to-price ratio as a basis for calculating the aggregate earnings yield. Again, the online Appendix contains a list of the 19 countries for which we have both liberalization dates and earnings yields, as well as the additional six countries for which we have dates—again from Chari, Henry, and Sasson (2012)—but no yields. The numbers are annual, and the plot starts at year  $-5$  because of data limitations (the average and median liberalization date is 1989, and there are only three countries with data on earnings yields in year  $-10$ , none of which are in Latin America). As a point of comparison, and a comparison 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 emerging and developing economies. Two aspects of the figure are noteworthy.

First, during the process of capital account liberalization and its aftermath, the average earnings yield of emerging and developing economies falls sharply and then gradually converges to that of the US economy. As shown in Figure 5, on impact—that is, between year  $-1$  and year  $0$ —the average earnings yield in emerging and

Figure 5

**The Cost of Equity Capital in Emerging and Developing Economies Fell When They Eased Restrictions on Foreign Ownership of Domestic Stocks**



*Note:* Figure 5 plots, in liberalization time, the average value of the earnings yield of the 18 emerging market and developing economies (EMDEs) for which there is information on both liberalization dates and the earnings-to-price ratio as a basis for calculating the aggregate earnings yield. The numbers are annual, and the plot starts at year -5 because of data limitations. As a point of comparison, 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 emerging and developing economies. Details of data and calculations in the online Appendix.

developing economies falls from 12.9 percent to 8.1 percent, a drop of 480 basis points in a single year. This decline is not the result of a few outliers, but instead a consistent fall in the cost of equity capital. Only four of the 19 countries—Chile (1987), India (1986), Malaysia (1987), and Thailand (1987)—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 gap between the earnings yield of the emerging and developing economies and that of the United States continues to narrow in the aftermath of liberalization, converging to zero in year 5.

Second, except for the rise in year 9 associated with the timing of the 1997–98 Asian financial crisis, the fall in earnings yields for emerging and developing economies appears to be permanent. The average yield for the 19 countries in the five years prior to liberalization of 12.5 percent drops to an average of 7.1 percent in the ten years after liberalization—a decrease of 540 basis points. In the case of the US equity market, 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 yield in emerging and developing economies is 220 basis points larger. The pattern of a longer-run post liberalization cost of equity



capital that is lower than the pre-liberalization cost is also extremely consistent. Of the 19 countries, South Africa with a 30-basis-point increase is the only country whose average cost of capital in the 10-year post-liberalization period is not lower than its five-year, country-specific, pre-liberalization average. South Africa is also the only country whose median post-liberalization cost of capital is not lower than its country-specific, pre-liberalization median.

The fall in the required rate of return for stocks, in conjunction with the onset of inflation stabilization and trade liberalization, provides a plausible, if admittedly oversimplified, explanation of the growth acceleration that took hold in the developing world in the early and mid-1990s. 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 macroeconomic stabilization and capital account liberalization reduced the cost of equity capital in emerging and developing economies. By tilting domestic output in the direction of comparative advantage and raising productivity, trade liberalization raised the aggregate rate of return on investing in capital. Falling costs of capital in conjunction with higher prospective returns to property, plants, and equipment provided a strong incentive to increase investment, and many countries in the developing world did, in fact, experience higher growth rates of capital, wages, and GDP following major reforms (Chari, Henry, and Sasson 2012; Chari and Henry 2008; Henry 2000b; Henry 2007).

In addition to giving emerging and developing economies access to a larger pool of savings, opening their stock markets to foreigners enabled developing nations to reduce their reliance on debt, which requires payments that are invariant to the borrower's circumstances, because they could instead resort to foreign direct investment and portfolio equity as alternative sources of capital. Baker's (1985, 210) speech mentioned the benefits of foreign equity financing as a complement to debt, but his remarks did not address a critical source of debt bias in the international financial system: implicit subsidies to *suppliers* of debt capital. Lenders to emerging and developing economies from the "G-7 countries" (Canada, France, Germany, Italy, Japan, United Kingdom, and United States) 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 (Bulow 2002; Rogoff 1999). Failure to address the debt bias left emerging and developing economies vulnerable in the future to the excessive reliance on leverage that lay at the heart of the 1980s debt crisis. Little surprise, then, that an overload of short-term, dollar-denominated debt was the proximate cause of both the 1994 Mexican crisis and the 1997–1998 Asian crisis (Feldstein 2002). Said another way, it is not capital account liberalizations per se that cause crises. The danger, instead, lies with liberalizations that ease restrictions on foreign borrowing (bonds and bank loans) without first implementing prudential regulations that guard against the pitfalls of leverage. Policy changes that grant legal protections for equity financing of investment in developing countries that are as strong as the protections in place for debt financing would mitigate debt bias and reduce the frequency of future financial crises in emerging markets.

There is an irony here. The aversion of developing country leaders in the 1970s to allowing foreigners to purchase shares in their countries' corporations created an excessive reliance on leverage, that when combined with adverse shocks led to a debt crisis, which, in turn, left them little choice but to open their equity markets to facilitate foreign direct investment—including the wave of privatizations that began in Latin America and spread to the former Soviet Union and Eastern Europe.

## **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 (1985) speech, the trend of selling state-owned enterprises took hold in the developing world. The output of state-owned enterprises as a share of GDP fell from a peak of 10 percent in 1986 to 4 percent in 1995 for upper-middle income developing countries, 12 percent in 1982 to less than 6 percent in 1995 for lower-middle income countries, and 16 percent in 1981 to 7 percent in 1993 for low-income countries (Megginson and Netter 2011).

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 creates more competition, it can increase consumer surplus and the overall quality of goods and services. 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 prominent debt default in August 1982, loss-making, state-owned enterprises in countries across Latin America contributed to chronic budget deficits that were the root cause of the region’s debt and inflation crises. The easing of restrictions on foreign ownership of domestic equity in the late 1980s and early 1990s facilitated the stock market sale of state-owned enterprises 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, and Brazil conducted equity sales in electricity, steel, and telecoms in 1997.

Because privatization is generally implemented at the level of the firm, evaluating its impact on economic growth is necessarily nuanced. 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 size 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.

In the twelve transition economies of Central and Eastern Europe and the Commonwealth of Independent States that replaced the Soviet Union, the average private-sector share of GDP rose from 13 percent in 1990 to 65 percent in 1998. These initial years of privatization were accompanied by deep recessions in Poland, Hungary, Romania, the Czech Republic, Slovakia, and the former Soviet Union due in substantial part to the massive disruptions that ensued during the transition from state to market (Blanchard and Kremer 1997; Estrin et al. 2009; Fischer 1992). In 1991, for example, 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, when accompanied by complementary reforms, may have had a positive effect on the long-run level of aggregate output (Svenjar 2002). The effects vary, however, 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; sales to domestic residents, on the other hand, resulted in weaker or categorically negative effects (Estrin et al. 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, subtle, 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 state-owned enterprises in oil, natural gas, and minerals—generally led to inefficiencies and corruption (Black, Kraakman, and Tarassova 2000). Gradual divestment in Poland and Slovenia was more positive (Svenjar 2002). Corporate governance and institutional frameworks are also important determinants of whether the transfer of ownership to private hands and later restructurings delivered 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. Early scholarship in the area found that real sales, operating efficiency, profitability, capital spending, and dividend payments all show significant increases, along with declining leverage (Megginson and Netter 2001; Boubakri and Cossett 1998). More recent work documents that improvements in operating performance exhibit sector- and region-specific heterogeneity. Bank performance, for example, improves significantly, but the gains from

privatization in electricity and water are limited, and the impact in telecommunications varies by region (Estrin and Pelletier 2018). Importantly, post-privatization improvements in profitability do not always result in layoffs, as a significant fraction of privatized firms actually employed 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 firms that are already better-positioned in some way, selection bias may lead to erroneous attribution of improved performance to the merits of private ownership (Dinc and Gupta 2011; Gupta, Ham, and Svejnar 2008).

Another concern about privatization stems from evidence in a sample of privatized firms in 39 emerging and developed countries that ownership becomes more concentrated in the two decades following divestment (Boubakri, Cosset, and Guedhami 2005). The risk and reality of increased concentration demonstrates 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 Russia and Eastern Europe. Prominent 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 “divestiture commissions” to perform breakups in industries where there were concerns about anti competitive behavior, and recommendations to perform market structure interventions to prevent collusion before divestiture (Tirole 1991). 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 underappreciated 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 foreign direct investment. 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, which suggests that the political economy of privatization has significant implications for efficiency.

## **Resistance and Resentment**

Efficiency-enhancing policy changes often involve difficult adjustments. In democratic settings, enough of those who might form a coalition blocking such

changes must be persuaded to back them (or at least not to oppose them actively) if the reform process is to be sustained (Brady and Spence 2009). Therefore, in addition to strategic knowledge about the aggregate benefits that such policy changes could bring, successful reform requires tactical knowledge—and bargaining chips. As Krueger (1988) wrote: “[T]he economic policies that lead to debt difficulties (and those that lead to rapid growth) are intensely political . . . [T]he 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.”

We have demonstrated that the Baker Hypothesis for how to improve growth stands up quite well to empirical scrutiny. The same cannot be said for Baker’s (1985) official three-step plan for bringing about reform. The Baker Plan stumbled, in large part, because it rejected Krueger’s point about debt overhang, which is the situation in which a country rules out additional borrowing, even for worthwhile purposes, because its current debts are so high that all the benefits of new borrowing would accrue to existing debtholders (Krugman 1988; Sachs 1989). 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. The Baker Plan did not ask the banks to write down debt to eliminate overhang, nor did it hold banks at least somewhat accountable for extending ill-advised loans in the past. Baker explicitly and publicly opposed any form of debt relief (as discussed in Arslanalp and Henry 2005).

Some changes did take place in the immediate aftermath of Baker’s speech (Williamson 2004). Colombia and Costa Rica, for example, liberalized trade in 1986, and a number of debt-laden countries undertook minimal reforms 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. The reform dates discussed earlier illustrate 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, Nicholas F. Brady, Baker’s successor at the US Treasury, announced a new financing facility in May 1989. In return for countries agreeing to implement and sustain the kinds of economic policy changes 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 a debt-reduction 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.

The accomplishments of the Brady Plan notwithstanding, Baker's uneven treatment of the debt overhang problem had lasting ramifications. Specifically, Baker's insistence that economic restructuring take place without the banks' accepting meaningful 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 of enduring resonance: that is, the theme that Washington, Wall Street, and the leaders of the international financial system resolved a banking crisis by driving through policy changes that hurt the common man and helped the bankers.

The consequences of failing to address debt overhang in the 1980s appears to have had some impact on the IMF and the World Bank, as they gradually adopted a more flexible approach to reforms. For instance, when the Asian financial crisis hit in late 1997, the IMF initially insisted on fiscal austerity, but changed tack in April 1998, allowing crisis-impacted governments to swing, on average, from a primary surplus of 1.8 percent of GDP to an average deficit of 1.8 percent (Chari and Henry 2015). The IMF displayed similar flexibility during the eurozone debt crisis, playing a central role in the government of Greece securing debt relief from its creditors, even though the arrangements were not finalized until June 2018. Debt overhang arguments also figured prominently in debt relief initiatives for the world's poorest countries, such as the 2005 Gleneagles Declaration and the World Bank and IMF's 2020 Debt Service Suspension Initiative in response to the pandemic.<sup>8</sup>

At present, leaders around the globe are grappling with the COVID-19 pandemic, along with increasing discontent over rising inequality and fears about the environment and climate change. But these legitimate concerns should not eclipse one of the most important stories about the world economy since the end of World War II, even as it continues to unfold. Certain economic policy reforms implemented by emerging and developing economies have significantly improved their economic performance, helping to lift hundreds of millions of people out of poverty with positive attendant consequences for health and life expectancy. Macroeconomic stability and economic efficiency are not sufficient conditions for a flourishing society, but they are absolutely necessary for sustainable and inclusive growth that allows an increasing fraction of a country's population to have choices and opportunity. The hard-won economic successes of the past three decades underscore the benefits of policymakers finding the will and the ways to meaningfully and constructively address the prospect of continued catch-up growth by emerging and developing economies.

<sup>8</sup>Arslanalp and Henry (2006) demonstrate that the debt situations of the world's poorest countries are sui generis and that debt overhang logic does therefore not apply to them.

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## References

- Amsden, A. H.** 1989. *Asia's Next Giant: South Korea and Late Industrialization*. New York: Oxford University Press.
- Andrés, Javier, and Ignacio Hernando.** 1999. "Does Inflation Harm Economic Growth? Evidence from the OECD." In *The Costs and Benefits of Price Stability*, edited by Martin Feldstein. Chicago: The University of Chicago Press.
- Arslanalp, Serkan, and Peter Blair Henry.** 2005. "Is Debt Relief Efficient?" *Journal of Finance* 60 (2): 1017–51.
- Arslanalp, Serkan, and Peter Blair Henry.** 2006. "Debt Relief." *Journal of Economic Perspectives* 20 (1): 207–20.
- Baker, James A. III.** 1985. "Statement of the Honorable James A. Baker III, Secretary of the Treasury of the United States Before the Joint Annual Meeting of the International Monetary Fund and the World Bank, October 8, 1985, Seoul, Korea" in *International Bank for Reconstruction and Development, International Finance Corporation, International Development Association. Annual Meetings of the Board of Governors Summary Proceedings*.
- Balassa, Bela.** 1977. *Policy Reform in Developing Countries*. Oxford: Pergamon Press.
- Black, Bernard, Reinier Kraakman, and Anna Tarassova.** 2000. "Russian Privatization and Corporate Governance: What Went Wrong?" *Stanford Law Review* 52 (6): 1731–1808.
- Blanchard, Olivier, and Michael Kremer.** 1997. "Disorganization." *The Quarterly Journal of Economics* 112 (4): 1091–1126.
- Boubakri, Narjess, and Jean-Claude Cosset.** 1998. "The Financial and Operating Performance of Newly Privatized Firms: Evidence from Developing Countries." *The Journal of Finance* 53 (3): 1081–1110.
- Boubakri, Narjess, Jean-Claude Cosset, and Omrane Guedhami.** 2005. "Postprivatization Corporate Governance: The Role of Ownership Structure and Investor Protection." *Journal of Financial Economics* 76 (2): 369–99.
- Brady, David, and Michael Spence.** 2009. "Leadership and Politics: A Perspective from the Growth Commission." *Oxford Review of Economic Policy* 25 (2): 205–18.
- Bruno, Michael, and William Easterly.** 1998. "Inflation Crises and Long-Run Growth." *Journal of Monetary Economics* 41 (1): 3–26.
- Bulow, Jeremy.** 2002. "First World Governments and Third World Debt." *Brookings Papers on Economic Activity* 1: 229–55.
- Chari, Anusha, and Peter Blair Henry.** 2004. "Risk Sharing and Asset Prices: Evidence from a Natural Experiment." *Journal of Finance* 59 (3): 1295–1324.
- Chari, Anusha, and Peter Blair Henry.** 2008. "Firm Specific Information and the Efficiency of Investment." *Journal of Financial Economics* 87 (3): 636–55.
- Chari, Anusha, and Nandini Gupta.** 2008. "Incumbents and Protectionism: The Political Economy of Foreign Entry Liberalization." *Journal of Financial Economics* 88 (3): 633–56.
- Chari, Anusha, and Peter Blair Henry.** 2015. "Two Tales of Adjustment: East Asian Lessons for European Growth." *IMF Economic Review* 63: 164–96.

- Chari, Anusha, Peter Blair Henry, and Diego Sasson.** 2012. "Capital Market Integration and Wages." *American Economic Journal: Macroeconomics* 4 (2): 101–32.
- Chomsky, Noam.** 1999. *Profit Over People: Neoliberalism and Global Order*. New York: Seven Stories Press.
- Commission on Growth and Development.** 2008. *The Growth Report: Strategies for Sustained Growth and Inclusive Development*. Washington, DC: World Bank.
- Coulibaly, Brahim, Belinda Archibong, Ngozi Okonjo-Iweala.** 2021. "Washington Consensus Reforms and Economic Performance in Sub-Saharan Africa." AGI Working Paper 27.
- Dinc, I. Serdar, and Nandini Gupta.** 2011. "The Decision to Privatize: Finance and Politics." *Journal of Finance* 66 (1): 241–69.
- Dornbusch, Rüdiger, and Stanley Fischer.** 1993. "Moderate Inflation." *World Bank Economic Review* 7 (1): 1–44.
- Dornbusch, Rüdiger, and Yung Chul Park.** 1987. "Korean Growth Policy." *Brookings Papers on Economic Activity* 2: 389–454.
- Easterly, William.** 1996. "When Is Stabilization Expansionary? Evidence from High Inflation." *Economic Policy* 11 (22): 65–107.
- Easterly, William.** 2019. "In Search of Reforms for Growth: New Stylized Facts on Policy and Growth Outcomes." NBER Working Paper 26318.
- Edwards, Sebastian.** 1995. *Crisis and Reform in Latin America: From Despair to Hope*. New York: Oxford University Press.
- Estevadeordal, Antoni, and Alan Taylor.** 2013. "Is the Washington Consensus Dead? Growth, Openness, and the Great Liberalization, 1970s–2000s." *Review of Economics and Statistics* 95 (5): 1669–90.
- Estrin, Saul, Jan Hanousek, Evzen Kocenda, and Jan Svejnar.** 2009. "The Effects of Privatization and Ownership in Transition Economies." *Journal of Economic Literature* 47 (3): 699–728.
- Estrin, Saul, and Adeline Pelletier.** 2018. "Privatization in Developing Countries: What Are the Lessons of Recent Experience?" *World Bank Research Observer* 33 (1): 65–102.
- European Bank for Reconstruction and Development.** 2007. *Transition Report 2007: People in Transition*. London: European Bank for Reconstruction and Development.
- Feldstein, Martin.** 2002. "Economic and Financial Crisis in Emerging Market Economies: Overview of Prevention and Management." NBER Working Paper 8837.
- Fischer, Stanley.** 1986. "Issues in Medium-Term Macroeconomic Adjustment." *World Bank Observer* 1 (2): 163–82.
- Fischer, Stanley.** 1987. "Economic Growth and Economic Policy." In *Growth-Oriented Adjustment Programs*, edited by Vittorio Corbo, Morris Goldstein, and Mohsin Khan, 151–178. Washington, DC: IMF and The World Bank.
- Fischer, Stanley.** 1992. "Stabilization and Economic Reform in Russia." *Brookings Papers on Economic Activity* 1: 77–126.
- Fischer, Stanley.** 1993. "The Role of Macroeconomic Factors in Growth." *Journal of Monetary Economics* 32 (3): 485–512.
- Fischer, Stanley.** 2003. "Globalization and Its Challenges." *American Economic Review* 93 (2): 1–30.
- Gertz, Geoffrey, and Homi Kharas.** 2019. *Beyond Neoliberalism: Insights from Emerging Markets*. Brookings Institution Report. Washington, DC: Global Economy and Development at Brookings.
- Gil Diaz, Francisco.** 2003. "Don't Blame Our failures on Reforms That Have Not Taken Place." *Fraser Forum*: 7–10.
- Global Financial Data Database.** 2021. "GFD Indices." *GFD Finaeon*. <https://finaeon-globalfinancialdata-com.proxy.library.nyu.edu/> (accessed June 28, 2021).
- Grier, Kevin B., and Robin M. Grier.** 2021. "The Washington Consensus Works: Causal Effects of Reform, 1970–2015." *Journal of Comparative Economics* 49 (1): 59–72.
- Gupta, Nandini.** 2005. "Partial Privatization and Firm Performance." *Journal of Finance* 60 (2): 987–1015.
- Gupta, Nandini, Jhon C. Ham, and Jan Svejnar.** 2008. "Priorities and Sequencing in Privatization: Evidence from Czech Firm Panel Data." *European Economic Review* 52 (2): 183–208.
- Ha, Jongrim, M. Ayhan Kose, and Franziska Ohnsorge.** 2019. *Inflation in Emerging and Developing Economies: Evolution, Drivers, and Policies*. Washington, DC: The World Bank.
- Henry, Peter Blair.** 2000a. "Stock Market Liberalization, Economic Reform, and Emerging Market Equity Prices." *Journal of Finance* 55 (2): 529–64.
- Henry, Peter Blair.** 2000b. "Do Stock Market Liberalizations Cause Investment Booms?" *Journal of Financial Economics* 58 (1–2): 301–34.
- Henry, Peter Blair.** 2002. "Is Disinflation Good for the Stock Market?" *Journal of Finance* 57 (4): 1617–48.



- Henry, Peter Blair.** 2007. "Capital Account Liberalization: Theory, Evidence, and Speculation." *Journal of Economic Literature* 45 (4): 887–935.
- Henry, Peter Blair.** 2013. *Turnaround: Third World Lessons for First World Growth*. New York: Basic Books.
- International Monetary Fund.** 2001. "The Decline of Inflation in Emerging Markets: Can It Be Maintained?" In *World Economic Outlook*. Washington, DC: International Monetary Fund.
- International Monetary Fund Database.** 2021. "Access to Macroeconomic and Financial Data." *International Financial Statistics Database*. <https://data.imf.org/?sk=4c514d48-b6ba-49ed-8ab9-52b0c1a0179b&Id=1409151240976> (accessed June 28, 2021).
- Irwin, Douglas A.** 2019. "Does Trade Reform Promote Economic Growth? A Review of Recent Evidence." NBER Working Paper 25927.
- Jao, Y.C.** 1976. "Trade and Economic Development in Taiwan." *Intereconomics* 11 (6): 172–76.
- Krueger, Anne O.** 1974. "The Political Economy of the Rent-Seeking Society." *American Economic Review* 64 (3): 291–303.
- Krueger, Anne.** 1988. "Resolving the Debt Crisis and Restoring Developing Countries Creditworthiness." Paper presented at the Carnegie-Rochester Public Policy Conference, University of Rochester.
- Krueger, Anne O.** 1995. "East Asian Growth Experience and Endogenous Growth Theory." In *Growth Theories in Light of the East Asian Experience*, edited by Takatoshi Ito and Anne O. Krueger. Chicago: University of Chicago Press.
- Krueger, Anne.** 2004. "Meant Well, Tried Little, Failed Much: Policy Reforms in Emerging Market Economies." Roundtable lecture presented at the Economics Honor Society, New York University, March 23.
- Krugman, Paul.** 1988. "Financing versus Forgiving a Debt Overhang." *Journal of Development Economics* 29 (30): 253–68.
- Krugman, Paul.** 1994. "Does Third World Growth Hurt First World Prosperity." *Harvard Business Review*, July–August 1994. <https://hbr.org/1994/07/does-third-world-growth-hurt-first-world-prosperity>.
- Lewis, W. Arthur** 1954. "Economic Development with Unlimited Supplies of Labour." *The Manchester School* 22 (2): 139–91.
- Mathieson Donald J., and R. McKinnon.** 1981. "How to Manage a Repressed Economy." *Essays in International Finance* 145.
- McKinnon, Ronald I.** 1984. "The International Capital Market and Economic Liberalization in LDCs." *Developing Economies* 22 (4): 476–81.
- Meggison, William L., and Jeffrey M. Netter.** 2001. "From State to Market: A Survey of Empirical Studies on Privatization." *Journal of Economic Literature* 39 (2): 321–89.
- Menon, Ravi.** 2015. "An Economic History of Singapore: 1965–2065." Keynote address delivered at the Singapore Economic Review Conference, Singapore, August 5.
- Michalopolous, Constantine.** 1987. "World Bank Programs for Adjustment and Growth." World Bank Discussion Paper ERS 11.
- Obstfeld, Maurice.** 1998. "The Global Capital Market: Benefactor or Menace?" *Journal of Economic Perspectives* 12 (4): 9–30.
- Rodríguez, Francisco, and Dani Rodrik.** 2000. "Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence." *NBER Macroeconomics Annual* 15 (1): 261–325.
- Rodrik, Dani.** 2006. "Goodbye Washington Consensus, Hello Washington Confusion? A Review of the World Bank's *Economic Growth in the 1990s: Learning from a Decade of Reform*." *Journal of Economic Literature* 44 (4): 973–87.
- Rogoff, Kenneth.** 1999. "International Institutions for Reducing Global Financial Instability." *Journal of Economic Perspectives* 13 (4): 21–42.
- Roland, Gérard, ed.** 2008. *Privatization: Successes and Failures*. New York: Columbia University Press.
- Sachs, Jeffrey.** 1987. "Trade and Exchange Rate Policies in Growth-Oriented Adjustment Programs." In *Growth-Oriented Adjustment Programs*, edited by Vittorio Corbo, Morris Goldstein, and Mohsin Khan. Washington, DC: IMF and The World Bank.
- Sachs, Jeffrey.** 1988. "Conditionality, Debt Relief and the Developing Country Debt Crisis." NBER Working Paper 2644.
- Sachs, Jeffrey.** 1989. "The Debt Overhang of Developing Countries" In *Debt, Stabilization and Development*, edited by Guillermo A. Calvo, Ronald Findlay, Pentti Kouri, and Jorge Braga De Macedo. Oxford: Basil Blackwell, Oxford.
- Sachs, Jeffrey D., and Andrew Warner.** 1995. "Economic Reform and the Process of Global Integration." *Brookings Papers on Economic Activity* 1: 1–118.

- Sappington, David, and Joseph Stiglitz.** 1987. "Privatization, Information and Incentives." *Journal of Policy Analysis and Management* 6 (4): 567–85.
- Solow, Robert M.** 1956. "A Contribution to the Theory of Economic Growth." *Quarterly Journal of Economics* 70 (1): 65–94.
- Stiglitz, Joseph** 2002. *Globalization and Its Discontents*. New York: W.W. Norton & Company.
- Stulz, René M.** 1999. "Globalization of Equity Markets and the Cost of Capital." NBER Working Paper 7021.
- Svejnar, Jan.** 2002. "Transition Economies: Performance and Challenges." *Journal of Economic Perspectives* 16 (1): 3–28.
- Tirole, Jean.** 1991. "Privatization in Eastern Europe: Incentives and the Economics of Transition." *NBER Macroeconomics Annual* 6: 221–68.
- Wacziarg, Romain, and Karen Welch.** 2008. "Trade Liberalization and Growth: New Evidence." *World Bank Economic Review* 22 (2): 187–231
- Williamson, John.** 1990. "What Washington Means by Policy Reform." In *Latin American Adjustment: How Much Has Happened?* edited by John Williamson. Washington, DC: Institute for International Economics.
- Williamson, John.** 2004. "A Short History of the Washington Consensus." <https://www.piie.com/publications/papers/williamson0904-2.pdf>.
- World Bank Database.** 1960–2020. "Inflation, consumer prices (annual %)." International Monetary Fund international financial statistics and data files. <https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG> (accessed June 28, 2021).
- World Bank Database.** 1961-2019. "GDP growth (annual %)." World Bank national accounts data and OECD National Accounts data files. <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG> (accessed June 28, 2021).