

1 CHAPTER 6

2 **Emerging Markets in the**
3 **Aftermath of the Global**
4 **Financial Crisis**5 *Eswar S. Prasad*¹*Cornell University, Brookings Institution and NBER*6 **1 Introduction**

7 Emerging market economies (EMEs) have come to play a dominant role
8 in the world economy. They now account for a large and rising share of
9 global output and trade. Indeed, by virtually every economic indicator, the
10 prominence of EMEs has increased over the last few decades. This chapter
11 evaluates the empirical basis for this proposition and examines its validity
12 in the aftermath of the worldwide recession that was precipitated by the
13 global financial crisis of 2008–2009.

14 Before the financial crisis, there was a growing sense among investors
15 and policymakers that EMEs, with their newfound economic might, had
16 become more resilient to shocks originating in advanced economies. This
17 notion of emerging markets decoupling from advanced economies became
18 widely prevalent before the global financial crisis. The high and rising
19 growth gap between the two groups, with EMEs recording consistently
20 higher growth than advanced economies during the period 2000–2007,
21 supported this view.

¹This chapter draws on material from Kose and Prasad (2010) and Prasad (2011). I am grateful to Grace Gu for excellent research assistance.

1 The global financial crisis seemed to put paid to such notions of “decou-
2 pling.” As a significant fraction of EMEs followed the advanced countries
3 into recession, the crisis called into question the notion of greater resilience
4 of EMEs to advanced country shocks. This was not altogether a surprising
5 outcome as past episodes of business cycles suggest that deep and highly
6 synchronized recessions in advanced countries tend to have large spillovers
7 to the EMEs. Nevertheless, the growth gap between the two groups had cre-
8 ated the hope that EMEs could sustain high growth independent of growth
9 in advanced economies, and perhaps even become the key locomotives of
10 global growth, a hope that seemed to have been dashed by the worldwide
11 recession.

12 Remarkably, however, the majority of EMEs have bounced back briskly
13 from the global recession since mid-2009 and, as a group, the EMEs have
14 weathered the crisis much better than the advanced economies. This is not
15 to say that all EMEs did equally well in the aftermath of the global financial
16 crisis. There is significant variation in the degree of resilience displayed by
17 different groups of EMEs. For instance, Asian emerging markets, especially
18 China and India, have done far better than the economies of Emerging
19 Europe, while the emerging economies of Africa and Latin America were
20 not as badly affected by this recession in advanced economies compared to
21 previous such recessions.

22 Overall, the global financial crisis has proven to be a watershed event
23 that has intensified the prominence of EMEs. There is now a striking
24 dichotomy between advanced economies and EMEs in terms of the short-
25 term risks and policy challenges that they face. Among advanced economies,
26 the major concern is about weak growth and deflationary pressures, with
27 conventional monetary policy having reached its limits and the burden of
28 debt having risen to dangerous levels constraining the scope of fiscal policy.
29 In EMEs, by contrast, growth has rebounded sharply. With their strong
30 growth prospects, they now face rising inflation, surges of capital inflows
31 that are creating risks of bubbles in asset and credit markets, and pressures
32 of rapid currency appreciation. This points to another reality, that emerg-
33 ing markets are still buffeted by macroeconomic developments and policy
34 responses in the advanced economies.

35 In this chapter, I first provide an overview of a number of economic
36 indicators that point to the rising prominence of EMEs in the world econ-
37 omy and then discuss these economies’ contribution to world growth. I then
38 briefly summarize the effects that the global financial crisis had on these
39 underlying trends, followed by a discussion of what factors account for

1 cross-country differences in emerging markets' resilience to the aftershocks
 2 from the crisis. I will then discuss a looming macroeconomic problem —
 3 the growing burden of public debt in the advanced economies — and how
 4 this could affect phenomena such as capital flows and the growth bifurca-
 5 tion between advanced economies and emerging markets. Finally, I discuss
 6 the nature of external risks now faced by EMEs and whether the resilience
 7 they showed during the global financial crisis implies that they have become
 8 less vulnerable to balance of payments or currency crises, which had
 9 befallen many of them in previous years. The concluding section offers some
 10 thoughts on the broader role of EMEs in the global economic system.

11 **2 Rising Prominence of EMEs**

12 The world distribution of GDP has changed quite significantly over the past
 13 five decades. To demonstrate this, I first examine the size distribution of
 14 countries in 1960–1972 (the Bretton Woods period), 1973–1985 (the period
 15 before the recent surge in global integration) and 1986–2007 (the pre-crisis
 16 period of globalization). I then look at data for the crisis years, 2008–2010 to
 17 evaluate whether the crisis led to an intensification of the patterns detected
 18 in the three earlier periods.

19 Table 1 shows that, during the period 1960–1985, advanced economies
 20 on average accounted for about three-quarters of global GDP measured in
 21 purchasing power parity (PPP) adjusted current dollars. This share has
 22 declined gradually over time — by 1986–2007, it was down to 58 percent,

Table 1. Size Distribution of Groups and Regions, 1960–2010 (In Percent).

Group or region	1960–1972	1973–1985	1986–2007	2008–2010
Advanced economies	80.30	73.21	57.62	47.97
Emerging market economies	16.60	22.86	26.25	35.27
Other developing economies	3.09	3.93	3.17	3.52
United States	32.64	27.08	22.46	19.89
Japan	7.77	9.40	8.02	5.93
G-7	70.19	61.19	48.57	40.27
EU-15	34.41	31.10	22.79	18.60
Major emerging market economies	6.30	9.04	12.68	20.80

Note: Major emerging market economies refer to Brazil, China and India.

1 a fall of more than 20 percent relative to the 1960s. By contrast, the share
2 of emerging markets has risen steadily, from just about 17 percent in the
3 1960s to 26 percent during the globalization period, 1986–2007.

4 This trend intensified sharply during the period of and immediately
5 following the global financial crisis of 2008–2009. Consistent with the trend
6 of a steadily rising share, the last column of Table 1 shows that the share
7 of emerging markets rose to 35 percent by 2008–2010, up 9 percentage
8 points from the average level during the pre-crisis globalization period.
9 This matches a corresponding decline in the share of advanced economies,
10 from 58 percent in 1986–2007 to 48 percent in 2008–2010. The share of
11 other developing economies has remained modest and steady in the range
12 of 3–4 percent of world GDP over the last five decades, highlighting the
13 dramatic difference in growth performance between this group and the more
14 dynamic group of EMEs.

15 To examine these shifts in more detail, the bottom rows of Table 1
16 provide data on the relative sizes of some key countries and country groups.
17 The US remains the dominant economy in the world, although its share has
18 declined from 33 percent of the world economy in 1960–1972 to 22 percent
19 in 1986–2007. The share of the core group of EU economies falls more
20 over this period, from 34 percent to 23 percent. The most dramatic shift
21 is for the three major emerging markets — Brazil, China and India —
22 whose share nearly doubles in a relatively short period, from 9 percent in
23 1973–1985 to 13 percent in 1986–2007. A substantial part of the increase
24 in the share of the EMEs in the world GDP has been due to China and
25 India. For example, China’s share of world GDP has increased sharply
26 from 3.2 percent during the Bretton Woods period to 9.8 percent in the
27 globalization period. Similarly, the share of India has risen from 4.4 percent
28 to 5.6 percent across these periods.

29 These shifts pick up pace during the crisis years. In 2008–2010, the US
30 and EU-15 shares of world GDP continue to decline while that of the major
31 emerging markets increases further. During this period, the main emerging
32 markets account for 21 percent of world GDP, slightly higher than the
33 shares of the EU-15 countries (19 percent) and close to the share of the US
34 (20 percent). Thus, the global financial crisis has only accentuated rather
35 than reversed or slowed down ongoing shifts in the structure of the world
36 economy and the EMEs rising role in it.

37 To provide a more comprehensive picture of the distribution of global
38 GDP, I now expand the sample of countries in the globalization period
39 to include the emerging markets of Europe, along with a number of other

1 smaller developing countries for which consistent data are available only
 2 for the last couple of decades. This provides a more comprehensive picture
 3 of shifts in the world GDP distribution, although for a shorter period.
 4 Figure 1 shows the output shares of different groups of countries for 1990

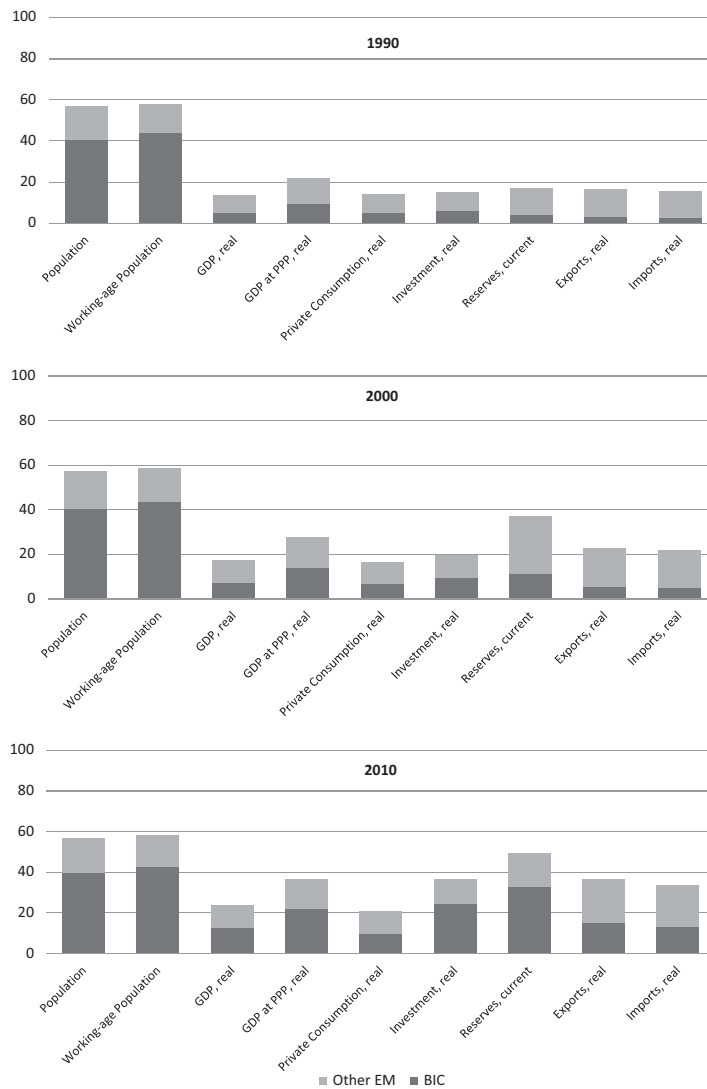


Fig. 1. Emerging Economies, Shares in the Global Economy (Percent).
 Note: BIC refers to Brazil, India and China.

1 and 2010. The top panel of this figure, which shows PPP-adjusted shares of
2 each country or group in world GDP, clearly shows the rising importance
3 of China and India and the relative decline of the US and other advanced
4 economies. Compared to their shares in 1990, the emerging economies of
5 Europe have a smaller share of GDP in 2010. The shares of the EU-15 and
6 other advanced economies also decline during the 2000s.

7 The lower panel of Figure 1 shows similar calculations as the top panel
8 but based on domestic GDP converted to a common currency (US dollars)
9 at market exchange rates. China and India still account for a larger share of
10 world GDP in 2010 than in 1990, but the increases in their shares, as well
11 as that of other emerging markets, is much smaller when market exchange
12 rates rather than PPP exchange rates are used in the calculations. The
13 broad patterns seen in the top panel are preserved, although it is clear
14 that the choice of exchange rate used in these calculations makes a signif-
15 icant difference because of the large deviations between market and PPP
16 exchange rates, especially in the case of emerging markets.

17 Other economic indicators provide a broader snapshot of the rising
18 prominence of emerging markets in the world economic order (Figure 2).
19 While their shares of the world population and world labor force have
20 remained relatively stable from 1990 to 2010, the EMEs have now become
21 more important on virtually every other economic dimension. The emerging
22 markets' shares of world GDP, private consumption, investment and trade
23 have nearly doubled in the space of two decades. Thus, this group now
24 has a much larger share of the world economy irrespective of the criterion,
25 although in some respects these shares may still be considered modest. For
26 instance, EMEs still account for only about one-fifth of world private con-
27 sumption, much lower than their shares of world GDP or world investment.
28 The latter result is of course largely reflective of developments in the Chi-
29 nese economy, where growth in recent years has been driven largely by fixed
30 investment growth, leading to a rising share of investment and a declining
31 share of private consumption in Chinese GDP.

32 Despite their economic size, EMEs still account for a smaller share of
33 global financial flows than advanced economies. Kose *et al.* (2009), for
34 instance, note that these economies account for only about one-tenth of
35 the global stocks of gross external assets and liabilities. On one dimension,
36 however, EMEs play a much more important role. The share of world fore-
37 eign exchange reserves held by emerging markets has nearly tripled over
38 this period, with this group of countries now accounting for a majority of
39 global reserves and continuing to accumulate them, a phenomenon that has

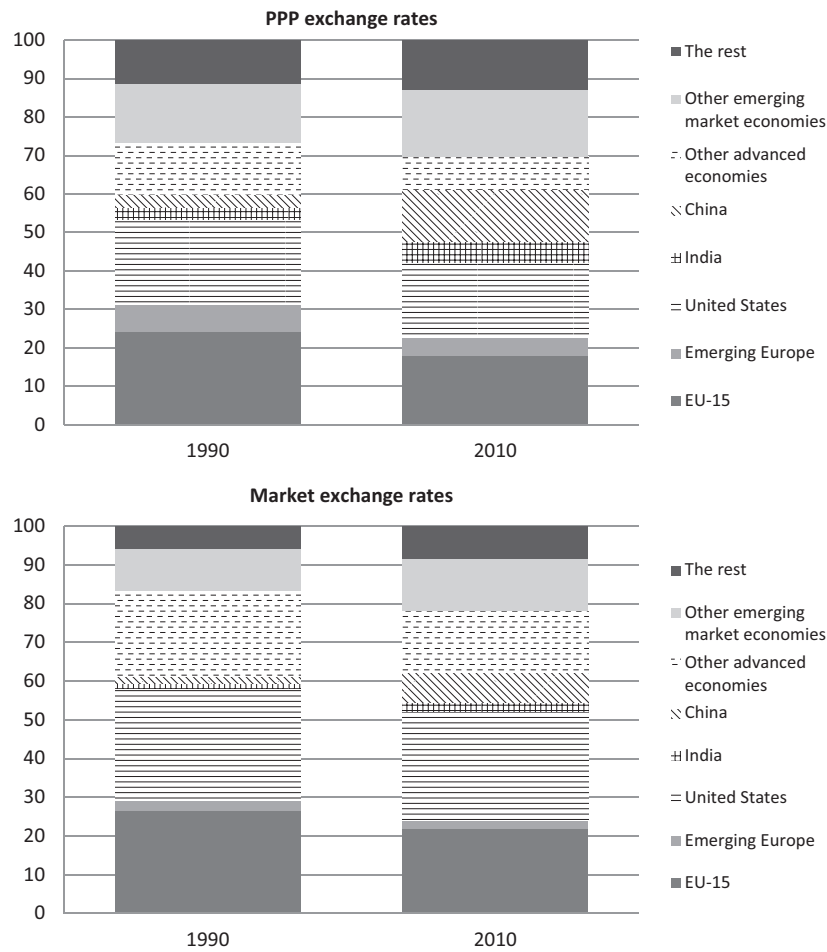


Fig. 2. Distribution of Global GDP (Percent).

1 implications for future global financial flows and stability and the financing
 2 of public debt accumulation in advanced economies.

3 This section has provided a number of indicators of how EMEs are
 4 now playing an increasingly important role in different aspects of the world
 5 economy. By virtually any measure, this shift in economic power away from
 6 advanced economies to EMEs was accentuated by the global financial crisis
 7 and the recession that followed it. The next question is whether EMEs are
 8 now driving world growth or if they are still being pulled along by advanced
 9 economies.

1 **3 The Distribution of World Growth**

2 The spectacular growth performance of EMEs in recent decades has
3 attracted the most attention. As a group, the EMEs have experienced far
4 greater cumulative growth since 1960 than other developing countries and
5 the advanced economies. Excluding Brazil, China and India — three of the
6 most prominent large, dynamic economies — from the list of emerging mar-
7 kets makes the performance of this group look less spectacular, although it
8 is still much better than that of the group of other developing countries.

9 I now examine the distribution of world growth, not just in terms of
10 GDP but also in terms of the key components of final demand — private
11 consumption and investment — with all variables measured in PPP terms.
12 This provides an indication of the quantitative contribution of each region
13 or country to world growth. I also look at the contributions of different
14 countries/regions to global export growth.

15 The top panel of Table 2 shows the growth in world GDP, consumption,
16 investment and exports, averaged over the periods 1960–1972, 1973–1985
17 and 1986–2007. The final column shows growth in GDP alone for the crisis
18 period 2008–2010 (consistent data on the components for GDP were not
19 available for all of the countries in the sample). The next three panels show
20 the growth contributions to each variable coming from different regions,
21 which add up to overall world growth of the corresponding variable.²

22 World GDP growth averaged 6.2 percent per annum during the period
23 1986–2007; lower than in the pre-globalization period.³ Going from the
24 pre-globalization period to the globalization period, one can already see
25 the sharp changes in the relative contributions of different country groups.
26 The contribution of the advanced economies to world GDP growth in
1973–1985 was 7.2 percentage points, almost three-quarters of world

²The contribution of country i to world GDP growth from time t to $t + 1$ is given by $[\text{GDP}(\text{country } i, \text{time } t + 1) - \text{GDP}(\text{country } i, \text{time } t)] / \text{GDP}(\text{world}, \text{time } t)$. The sum of the growth contributions of the three regions that constitute the world economy add up to total world GDP growth. Some small discrepancies between the sums of the three regions' contributions and world GDP growth in the latest period are attributable to data availability problems for a handful of countries.

³These growth rates are calculated using PPP exchange rates to evaluate the GDP weight of each country in world GDP. World GDP growth based on market exchange rates was lower during 2008–2009 than the number mentioned here, largely because the main emerging markets continued to post relatively strong growth during the global recession and these economies of course have a much higher PPP-based weight in world GDP.

Table 2. Contributions to Global Growth, by Group and Region, 1960–2010 (In Percent).

Group or region	1960–1972	1973–1985	1986–2007	2008–2010
<i>World</i>				
GDP	11.60	10.22	6.18	2.35
Consumption	5.01	3.17	3.03	—
Investment	6.74	2.43	3.77	—
Exports	7.77	5.24	6.61	—
<i>Advanced economies</i>				
GD	7.18	7.16	3.53	−0.56
Consumption	4.34	2.50	2.32	—
Investment	5.93	1.70	2.46	—
Exports	6.62	4.26	4.11	—
<i>Emerging market economies</i>				
GDP	3.71	2.66	2.43	2.09
Consumption	0.60	0.62	0.81	—
Investment	0.73	0.65	1.34	—
Exports	0.90	0.87	2.37	—
<i>Other developing economies</i>				
GDP	0.70	0.40	0.22	0.16
Consumption	0.07	0.05	0.04	—
Investment	0.07	0.08	0.04	—
Exports	0.25	0.11	0.13	—
<i>United States</i>				
GDP	2.40	2.69	1.48	0.01
Consumption	1.58	1.11	1.16	—
Investment	1.31	0.88	1.03	—
Exports	0.92	0.71	1.01	—
<i>Japan</i>				
GDP	0.99	1.03	0.45	−0.05
Consumption	1.06	0.57	0.34	—
Investment	2.26	0.52	0.44	—
Exports	0.84	0.80	0.38	—
<i>EU-15</i>				
GDP	3.17	2.88	1.32	−0.15
Consumption	1.44	0.68	0.63	—
Investment	2.04	0.17	0.78	—
Exports	3.91	2.32	2.29	—
<i>Major emerging market economies</i>				
GDP	1.48	1.11	1.37	1.66
Consumption	0.16	0.24	0.36	—
Investment	0.27	0.27	0.83	—
Exports	0.18	0.23	0.92	—

1 growth of 10.2 percent. EMEs contributed 2.7 percentage points to world
2 growth during this period. During the pre-crisis globalization period, these
3 economies contribute about 40 percent of world growth (2.43/6.18) while
4 the share of advanced economies falls to about 57 percent (3.53/6.18).

5 Interestingly, the contribution of EMEs to global consumption growth
6 is much lower than their contribution to GDP growth. During 1986–2007,
7 this group accounted for less than one-third of global consumption growth
8 (0.81/3.03) and about one-third of global investment growth (1.34/3.77).
9 Thus, advanced economies still appear to be the key contributors to the
10 growth in global domestic demand.

11 The picture of the growth contributions of different groups of economies
12 shifts dramatically during the crisis years 2008–2010. The last column of
13 Table 2 shows how much these relative contributions shifted. During this
14 period, EMEs accounted for nearly 90 percent of world growth during 2008–
15 2009 (2.09/2.35), while the share of advanced economies was in fact negative
16 as many of them contracted slightly during this period. In other words, the
17 direct contribution of emerging markets to GDP growth has continued to
18 increase over time and was further accentuated during the financial crisis,
19 while the reverse has been true for advanced economies.

20 The lower panels of Table 2, which show the results for four key sets
21 of advanced economies and also for the three major emerging markets (the
22 group of Brazil, China and India) shows these patterns more clearly. The
23 relative contributions of the US, Japan and the set of EU-15 countries has
24 declined markedly in the globalization period relative to the pre-globalization
25 period and all of them have experienced virtually no growth during the crisis
26 years of 2008–2010. The EU-15 recorded negative growth on average during
27 these three years. By contrast, the group of three major EMEs by themselves
28 account for 71 percent of world growth during the crisis years.

29 Figure 3 shows similar calculations for world GDP growth for an
30 expanded group of countries including the economies of Emerging Europe
31 but only since 1990. This figure complements the data in Table 2 by showing
32 the contributions of different countries or groups as shares relative to world
33 GDP growth (the table shows absolute contributions rather than shares).
34 To highlight the general trend in the globalization period and distinguish it
35 from the first year of the crisis, I present growth contributions of different
36 countries and regions for 1990, the average for 2000–2007 and separately
37 for 2008–2010.

38 The top panel of Figure 3 shows growth contributions based on PPP-
39 adjusted GDP data. The growth contributions of China, India and other

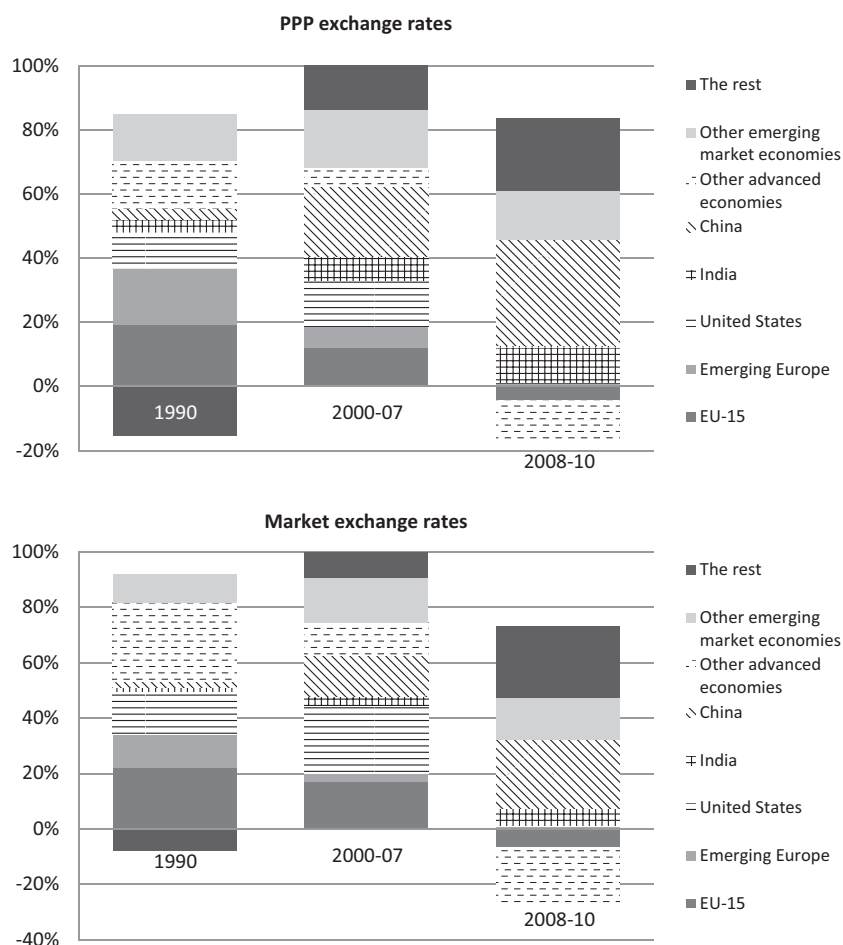


Fig. 3. Contributions to GDP Growth.

1 emerging markets increase from 1990 to 2000–2007, offsetting a decline in
 2 the shares of the US and other advanced economies. In 2008–2010, the
 3 growth contributions of China, India and other emerging markets con-
 4 tinue to rise, but the shares accounted for by the US and other advanced
 5 economies fall while the contribution of Emerging Europe remains steady.

6 The lower panel of Figure 3 shows similar calculations based on GDP
 7 converted to a common currency at market exchange rates. As was the case
 8 with the GDP levels, the patterns of growth contributions based on market
 9 exchange rates are quite similar to those based on PPP exchange rates, but

1 are quantitatively less favorable to EMEs. Interestingly, the growth contri-
2 butions of Emerging European economies increase in 2008–2010 relative to
3 2000–2007 when measured on the basis of market exchange rates.

4 In short, EMEs not only weathered the global financial crisis relatively
5 well but in fact their prominence in terms of driving world growth increased
6 during the period 2008–2010. Nevertheless, it remains an open question
7 whether EMEs have self-sustaining domestic demand that will allow them
8 to remain decoupled from developments in advanced economy business
9 cycles.

10 **4 What Explains the Resilience of Emerging Markets?**

11 Although the EMEs as a group performed well during the global reces-
12 sion, there were sharp differences across emerging economies in different
13 regions.⁴ The economies of emerging Asia had the most favorable outcome,
14 experiencing relatively modest declines in growth rates. China and India,
15 which are the two largest economies in Emerging Asia and which main-
16 tained strong growth during the crisis, obviously play an important role
17 in the performance of this group. Excluding these two countries (and also
18 Hong Kong SAR) from the Emerging Asia group leaves that group with a
19 less impressive but still solid performance overall.

20 Emerging Europe had the sharpest fall in total output during 2009,
21 followed by Latin America. By contrast, and somewhat surprisingly, the
22 economies of the Middle East and North Africa (MENA) region as well
23 as those of Sub-Saharan Africa weathered the crisis better, with only small
24 declines in output. For these two latter groups, their relatively modest expo-
25 sures to trade and financial flows from advanced economies may have lim-
26 ited the extent of spillovers of the global shock. These countries had also
27 improved their macroeconomic policies, giving them more space in respond-
28 ing to the global shock with countercyclical policy tools.

29 Latin America, by contrast, is more closely integrated with advanced
30 economies, especially the US. Although Latin American EMEs did suffer
31 growth contractions during the crisis, they have bounced back relatively
32 strongly. This is in contrast to previous episodes of global financial turbu-
33 lence (1982, 1998, 2001), during which Latin American economies proved to

⁴See Kose and Prasad (2010). Lane and Milesi-Ferretti (2010) also report that there are substantial differences in the impact of the crisis across regions.

1 be vulnerable to currency and debt crises.⁵ Izquierdo and Talvi (2010) note
2 the role played by strong macroeconomic fundamentals — low inflation,
3 twin external and fiscal surpluses, a sound banking system, a large stock of
4 international reserves and flexible exchange rate regimes — in ensuring the
5 resilience of Latin American economies during the recent crisis.

6 Thus, the two sets of emerging markets that present the sharpest con-
7 trast in terms of resilience to the global financial crisis are the emerging
8 markets of Asia and Europe. Prior to the crisis, average per capita GDP
9 growth was highest in these two groups of emerging markets. In 2009, Asian
10 emerging markets posted the highest average rate of growth while European
11 emerging markets had the lowest. Based on the comparative stylized anal-
12 ysis of the experiences of emerging Asian and Eastern European economies
13 as well as a reading of the rapidly expanding literature on this subject, Kose
14 and Prasad (2010) identify a few factors that appear to have underpinned
15 the relative resilience of EMEs as a group during the global financial crisis,
16 and could also help explain differences in resilience across different groups
17 of EMEs.

18 1) *Less dependence on foreign finance and shift away from foreign currency-*
19 *denominated external debt.* As a group, the emerging markets have been
20 net exporters of capital during the last decade. The Asian emerging
21 markets, especially China but also others such as Russia and some of
22 the Latin American economies, have been running significant current
23 account surpluses in recent years. There are of course certain groups
24 of EMEs, especially those in Emerging Europe, that have been running
25 large current account deficits and financing their domestic investment
26 using foreign savings. This group indeed proved most vulnerable to the
27 crisis. More generally, Eichengreen (2010) documents that countries with
28 large current account deficits and corresponding large financing require-
29 ments were hit harder by the crisis. The majority of emerging markets
30 have become a lot less reliant on foreign finance, particularly external
31 debt.

32 2) *Large buffers of foreign exchange reserves.* Following the Asian financial
33 crisis of 1997–1998, emerging markets around the world have built up
34 large buffers of foreign exchange reserves, partly as a result of export-
35 oriented growth strategies and partly as a form of self-insurance against

⁵See IMF (2009a, 2009b), for economic and financial developments in Latin America during the crisis.

- 1 crises associated with sudden stops or reversals of capital inflows. Frankel
2 and Saravelos (2010) present evidence that foreign exchange reserve lev-
3 els had a major impact on countries' vulnerability to the global financial
4 crisis.⁶
- 5 3) *Greater trade linkages among the EMEs* have increased their resilience
6 as a group. In particular, commodity-exporting countries have been
7 shielded to some extent from the slowdowns in the advanced economies
8 by strong growth in the EMEs. For instance, China's continued
9 rapid growth during the crisis, fueled by a surge in investment, has
10 boosted the demand for commodities from emerging markets such as
11 Brazil and Chile and has also increased the demand for other raw mate-
12 rials and intermediate inputs from other Asian emerging markets.
- 13 4) *Emerging markets have become more diversified in their production and*
14 *export patterns*, although this has, to a significant extent, been offset by
15 vertical specialization that has led to rising integration of some emerg-
16 ing markets, particularly those in Asia, through regional supply chains.
17 Such diversification offers limited protection against large global shocks
18 but, so long as the effects of shocks are not perfectly correlated across
19 countries (export markets), it can serve to promote resilience in response
20 to more normal types of shocks. Diversification of production, especially
21 to reduce dependence on exports of commodities and raw materials that
22 have long and volatile price cycles, can also increase resilience.
- 23 5) *Broader divergence of EME business cycles from those of the advanced*
24 *economies*. This has happened on account of the factors noted above,
25 along with greater intra-group trade and financial linkages. There has
26 also been a proliferation of trade and financial flows within the group
27 of emerging markets, both at the regional and inter-regional levels. This
28 phenomenon is partly the natural result of geographical proximity boost-
29 ing trade flows and of financial flows following trade. There have also
30 been specific policy initiatives in certain regions to promote regional
31 financial integration. Examples of this are the Chiang Mai and Asian

⁶Of course, the benefits of large reserves stocks have to be carefully considered relative to the costs of accumulating them, both in terms of the quasi-fiscal costs as well as the more subtle costs in terms of the constraints on domestic policies. Rodrik (2006) estimates the social cost of self-insurance through holding reserves to be about 1 percent of GDP for developing countries as a group. Prasad and Rajan (2006) and Prasad (2009b) discuss how China's currency policy that has resulted in rapid reserve accumulation has constrained domestic macroeconomic policies and hampered financial sector reforms, both of which could have long-term consequences for economic welfare.

- 1 Bond Fund initiatives that were set up as ways to encourage regional
2 financial integration and financial market development among the par-
3 ticipating Asian countries. However, the scope and scale of these initia-
4 tives have remained limited and, even for the Asian region as a whole,
5 financial flows with the rest of the world still dwarf intra-Asian flows.
6 Over the long run, initiatives to develop regional insurance mechanisms
7 by pooling reserves and attempts to increase the use of major currencies
8 such as the Chinese renminbi could serve to insulate the region better
9 from global shocks.
- 10 6) *Better macroeconomic policies, including flexible exchange rates in a*
11 *number of emerging markets.* During the Great Moderation, most emerg-
12 ing markets succeeded in bringing inflation under control, through a
13 combination of more disciplined fiscal policies and more credible mon-
14 etary policies. Indeed, a large number of emerging markets have now
15 adopted some form of inflation targeting along with flexible exchange
16 rates, which act as shock absorbers for external shocks (Rose, 2007). This
17 has led to moderate and less volatile inflation. In turn, stable macroe-
18 conomic policies have facilitated a shift towards more stable forms of
19 financial inflows and also made international investors less concerned
20 about the safety of their investment in emerging markets. Prudent fis-
21 cal policies that have resulted in low levels of fiscal deficits and public
22 debt seem to have created room for EMEs to respond aggressively with
23 countercyclical fiscal policies to offset the contradictory effects of the cri-
24 sis (Ghosh *et al.*, 2009). Economies with high credit growth rates seem
25 to have fared worse, especially if credit expansion was largely financed
26 through foreign capital (as in the case of many countries in Emerging
27 Europe) rather than domestic savings (e.g., China and India).
- 28 7) *Rising per capita income levels and a burgeoning middle class* have
29 increased the size and absorptive capacity of domestic markets, mak-
30 ing emerging markets potentially less reliant on foreign trade to benefit
31 from scale economies in their production structures and also less sus-
32 ceptible to export collapses (see Kharas, 2010). But, as noted earlier, it
33 is still not clear that EMEs have truly become

34 5 Global Public Debt and Implications for the Growth Gap

35 The accumulation of reserves by EMEs has been an important feature of
36 global capital flows and has contributed to the “uphill” flows of capital from

1 poorer to richer countries. As discussed in the previous section, EMEs with
2 large stocks of reserves were less affected by the crisis. In light of ongoing
3 global financial turmoil, these economies are likely to continue accumulating
4 reserves in order to self-insure themselves against future crises and to avoid
5 having to seek financial assistance from the International Monetary Fund.
6 The other side of this coin is related to the trajectories of government debt
7 in advanced economies.⁷ To examine the evolution of such assets around
8 the world, I now examine trajectories of net government debt around the
9 world.⁸ This has implications for financial flows as well as for global financial
10 stability if these debt burdens become unsustainable and trigger financing
11 problems, as has already happened to some countries in the euro zone.

12 The global financial crisis triggered a sharp increase in public debt levels,
13 both in absolute terms and relative to GDP. Data from the IMF's June 2011
14 Fiscal Monitor show that the level of aggregate net government debt in the
15 world rose from \$22 trillion in 2007 to an expected \$34 trillion in 2011. IMF
16 forecasts indicate the level will reach \$48 trillion in 2016. The ratio of world
17 net debt to world GDP rose from 42 percent in 2007 to 57 percent in 2011,
18 and is expected to hit 58 percent in 2016.

19 Since the onset of the crisis, the bulk of the increase in global public
20 debt is accounted for by advanced economies. Relative to their GDP, debt
21 levels in these economies are expected to continue rising in the next few
22 years. By contrast, debt ratios will shrink for emerging markets. Indeed,
23 advanced economies account for the bulk of the increase in global public
24 debt since 2007, both in absolute terms and relative to GDP.

- 25 • Aggregate debt of advanced economies will increase from \$18 trillion in
26 2007 to \$30 trillion in 2011, and is expected to rise to \$41 trillion in
27 2016. The corresponding numbers for emerging markets are \$4 trillion,
28 \$5 trillion and \$7 trillion, respectively.⁹

⁷Caballero, Farhi and Gourinchas (2008a, 2008b) argue that emerging markets' search for safe assets precipitated global macroeconomic imbalances. Mendoza, Quadri and Rios-Rull (2010) make a related point that the greater financial depth of advanced economies attracts large inflows.

⁸I focus on central government securities as those are most relevant for reserve accumulation. Net debt is preferable for the purposes of my analysis as the remaining portion of gross debt is typically held domestically.

⁹The reported debt levels of emerging markets should be interpreted with caution. In China, for instance, financial liabilities of provincial governments and contingent liabilities such as nonperforming assets held by the state-owned banking system imply a much higher value of government debt obligations than indicated by official statistics.

Table 3. Net Debt to GDP (In Percent).

	2007	2011	2016
World	42.0	56.4	57.7
U.S.	42.6	72.4	85.7
Euro Zone	52.4	68.1	69.5
Japan	81.5	127.8	163.9
UK	38.2	75.1	73.5
Other AE	18.5	25.9	22.1
EM	29.2	26.1	21.5

Source: IMF Fiscal Monitor, April 2011 and June 2011 Update; IMF WEO, April 2011 and June 2011 Update.

- 1 • The ratio of aggregate debt to aggregate GDP for advanced economies
 2 will rise from 46 percent in 2007 to 70 percent in 2011 and further to
 3 80 percent in 2016. The corresponding ratios for emerging markets are
 4 28 percent, 26 percent and 21 percent, respectively.

5 Table 3 shows net debt to GDP ratios for some of the key countries/
 6 economic groups. In the US, the net debt to GDP ratio has gone from
 7 43 percent in 2007 to 72 percent in 2011, and is expected to rise further
 8 to 86 percent by 2016. By 2016, debt in the euro zone and in the United
 9 Kingdom will be at about 70 percent of GDP. By contrast, the average ratio
 10 of net debt to GDP for the EMEs is expected to decline from 26 percent in
 11 2011 to 22 percent by 2016.

12 There is also a stark contrast between the two groups of countries in
 13 their relative contributions to growth in world debt versus growth in world
 14 GDP. Emerging markets contribute far more to growth in global GDP than
 15 to the growth in global public debt. Some illustrative statistics follow:

- 16 • In 2007, emerging markets accounted for 25 percent of world GDP and
 17 17 percent of world debt. By 2016, they are expected to produce 38 per-
 18 cent of world output and account for just 14 percent of world debt.
 19 • In 2011 (based on IMF estimates at market exchange rates), the four
 20 major reserve currency areas together account for 58 percent of global
 21 GDP and 81 percent of global debt.

Of course, as the recent crisis has shown, advanced economy governments arguably have similar implicit contingent liabilities if their big banks were to run aground or their public pension systems were to run out of money.

- 1 • Emerging markets account for 9 percent of the increase in global debt
2 levels from 2007 to 2011 and are expected to account for 13 percent of the
3 increase from 2011 to 2016. By contrast, their contributions to increases
4 in global GDP over these two periods are 66 percent and 56 percent,
5 respectively.
- 6 • The two biggest advanced economies are making a far greater contribu-
7 tion to the rise in global debt than to the rise in global GDP. The US
8 contributes 37 percent of the increase in global debt from 2007 to 2011
9 and 40 percent from 2011 to 2016. Its contributions to the increases in
10 global GDP over those two periods are 8 percent and 18 percent, respec-
11 tively. Japan accounts for 20 percent of the increase in debt from 2007
12 to 2011 and 34 percent from 2011 to 2016 while its contributions to the
13 increase in global GDP are 4 percent and 8 percent, respectively.

14 High and rising debt levels among advanced economies pose serious
15 risks to global macroeconomic stability that would almost certainly have
16 significant knock-on effects on EMEs. Of course, the implications of rising
17 debt levels and their sustainability depend to a large extent on whether
18 these debts are financed from domestic savings or by foreign investors. In
19 the case of the US, foreign investors — both official and private — hold
20 about half of the outstanding stock of net central government debt. Foreign
21 investors have played an important role in the financing of net US debt.
22 During 2008–2010, when net debt accumulation soared to \$1.3 trillion per
23 year, foreign investors accumulated \$695 billion per year, accounting for
24 just over half of total US net debt issuance.

25 This ratio is lower for the UK — about one-third of its net debt is held by
26 foreign investors — and even lower, less than 10 percent, for Japan, which
27 has a very high domestic savings rate. It is harder to obtain a consistent
28 picture for the euro area as available data include within-euro area holdings
29 and do not provide a clear picture of how much euro area sovereign debt is
30 held by investors from outside the euro area.

31 These figures paint a sobering picture of worsening public debt dynamics
32 and a sharply rising public debt burden in advanced economies, along with
33 a high level of dependence on foreign investors in search of a safe haven,
34 especially in the case of the US. The major reserve currency economies —
35 especially the US and Japan — face daunting trajectories of public debt
36 and weak growth prospects. Indeed, with low levels of population growth,
37 rapidly aging populations and rising costs of health care and other entitle-
38 ment programs, advanced economies as a group could be in far worse shape

1 beyond the medium-term horizon discussed in this section if they do not
2 bring their public finances under control.¹⁰

3 In advanced economies, rising public debt levels imply significant
4 crowding-out effects that will affect productivity growth and could generate
5 a persistent productivity growth gap relative to emerging markets. Balance
6 sheets of households and the financial sector in advanced economies were
7 severely damaged by the financial crisis and are only now beginning to
8 recover, putting a further crimp on these economies' growth prospects. All
9 of this implies that the growth bifurcation between EMEs and advanced
10 economies is likely to persist well into the future. This is likely to be the
11 case even if the major EMEs hit the middle income trap and experience
12 growth slowdowns due to their aging populations and other factors that
13 could constrain long-term growth in these economies (Eichengreen, Park
14 and Shin, 2011).

15 6 Risks

16 Given their promising growth prospects, one remaining question is whether
17 emerging markets still face significant risks of crises, which they were vul-
18 nerable to in the past. While these economies face a number of difficult
19 policy dilemmas, the discussion in Section 4 suggests that they have in
20 fact become more resilient to external shocks. I now review two aspects
21 of these economies' external balance sheets that imply reduced vulnerabil-
22 ity to traditional balance of payments crises, although these countries may
23 still be subject to the effects of capital flow volatility as they become more
24 integrated into international financial markets.

25 One factor that plays an important role in affecting vulnerability to
26 crises and also the ability to recover quickly from their aftermath is the
27 level of international reserves held by a country (see, e.g., Frankel and
28 Saravelos, 2011). Figure 4 shows the rapid rate of reserve accumulation by
29 emerging markets, which peaked in 2007, declined but remained positive in
30 2008–2009, and then began to pick up again in 2010. Total foreign exchange
31 reserves of emerging markets now amount to about \$6.4 trillion, with China
32 accounting for half of this stock. In short, EMEs have now accumulated a

¹⁰Cecchetti, Mohanty and Zampolli (2010) present sobering projections of advanced economies' long-term debt levels under current policies in those countries.

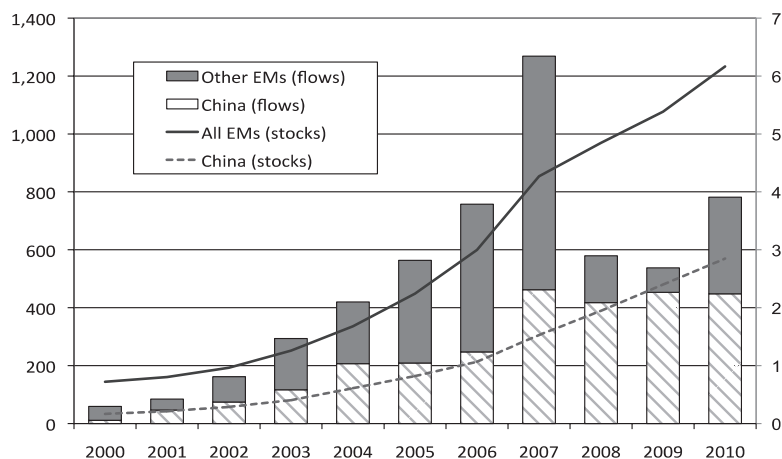


Fig. 4. International Reserves of Emerging Markets.

Note: Flows refer to annual accumulation of reserves (in billions of dollars, left scale). Stocks refer to end-of-year stocks of reserves (in trillions of US dollars, right scale).

1 large stock of reserves that provides a high level of self-insurance against
2 sudden stops and reversals of capital inflows.

3 Another important consideration in determining vulnerability to external
4 shocks to the capital account is the structure of EMEs' external
5 liabilities. These were once dominated by short-term foreign-currency
6 denominated external debt, making these countries subject to currency risk
7 as well as the risk of procyclical capital flows (and procyclical access to inter-
8 national financial markets, which reduced the potential risk-sharing benefit
9 of international financial integration). This pattern has changed markedly,
10 with foreign direct investment and portfolio equity, far more desirable forms
11 of capital in terms of their direct and indirect benefits, now accounting for
12 a majority of their external liabilities. Figure 5 shows that the median
13 (median across countries) share of debt total external liabilities of EMEs
14 has fallen from over 80 percent in the mid-1980s to below 40 percent in
15 2009. By contrast, the share of FDI has climbed to more than 50 percent
16 and that of portfolio equity is now close to 20 percent.

17 Moreover, external debt issued by these countries is increasingly denomi-
18 nated in their own currencies. This structure of liabilities helps share risk
19 across countries, with foreign investors bearing capital as well as currency
20 risk on such investment. Even taking into account the greater volatility of
21 portfolio equity flows relative to FDI, this implies more risk sharing with

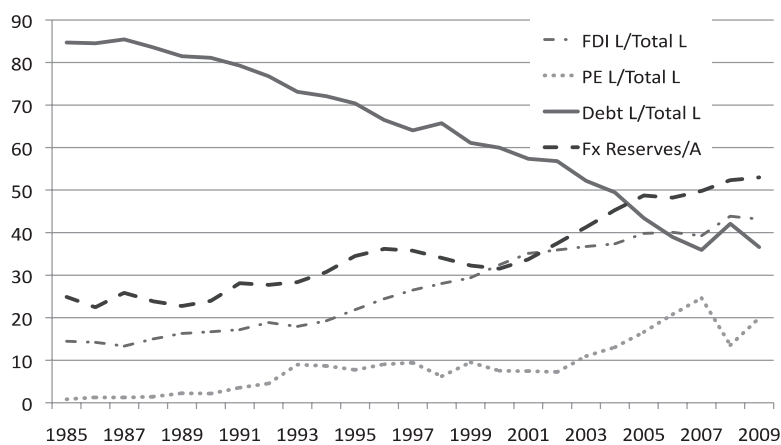


Fig. 5. Key Components of Emerging Market External Assets and Liabilities (Shares, in Percent).

Notes: Stocks of foreign direct investment (FDI), portfolio equity (PE) and external debt are shown as ratios of total external liabilities (L), with each of these variables summed up across all emerging market economies. The stock of foreign exchange reserves is shown as a ratio to total external assets (A).

1 international investors. By contrast, portfolio debt and bank loans together
 2 still constitute the major share of advanced economies' external liabilities.
 3 In short, changes in the structure of EMEs' external liabilities and the
 4 high levels of international reserves have reduced the vulnerability of these
 5 economies to balance of payments and currency crises, which had been the
 6 bane of these economies in the past.

7 Concluding Remarks

8 Emerging market economies have become key players in the world economy
 9 in terms of their sheer size. This phenomenon has been accentuated dur-
 10 ing the period of globalization and has further intensified during the global
 11 financial crisis as the group of emerging markets continued to expand at a
 12 relatively robust rate while advanced economies essentially came to a stand-
 13 still. It is also clear that EMEs have become increasingly more important
 14 in terms of driving global GDP growth, although their contributions to the
 15 growth in global domestic demand are lower. This group of economies has
 16 essentially been responsible for most of global GDP growth during the latest
 17 financial crisis and it is likely that, even if they experience a modest growth

1 slowdown, there will remain a persistent and large growth gap between
2 EMEs and advanced economies.

3 Along with an increase in their economic heft, EMEs are also becoming
4 more important players in setting the global priorities. The increasing irrel-
5 evance of the G-7 and the unofficial anointment of the G-20 as the major
6 body setting the global economic agenda have given EMEs a prominent
7 seat at the table. The same is true in international institutions such as the
8 Financial Stability Board and the IMF, where EMEs have a much larger
9 say than ever before. With this change will come some new responsibilities
10 as emerging markets need to recognize that they need to make a direct
11 contribution to good global governance.

12 Emerging markets have attained a good level of maturity in terms of
13 their economic size, domestic policy frameworks and influence on the world
14 economy. The global financial crisis presents a unique opportunity for them
15 to mature in another dimension — taking on more responsibility for global
16 economic and financial stability, including strengthening global economic
17 governance.

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