



**GROUP OF TWENTY**

## **Investment and its Financing: A Macro Perspective**

**Annex to the G-20 Surveillance Note  
Meetings of G-20 Finance Ministers and Central Bank Governors  
February 15–16, 2013**



**Prepared by Staff of the**

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Does not necessarily reflect the views of the IMF Executive Board.

## SUMMARY<sup>1</sup>

*Since the great recession, investment has been very weak in advanced economies, while it has been strong in many emerging economies, particularly in emerging Asia. Going forward, continuing sluggish investment in advanced economies, and to some extent in emerging Europe, may weigh down on potential output, and growth, over the medium term. Investment financing has evolved broadly in line with the relative economic performance of the G-20 members. FDI inflows to emerging Europe declined as corresponding outflows from advanced economies receded some, but FDI inflows to emerging Asia and Latin America have remained broadly at pre-crisis levels. Total bank credit in emerging Asia and Latin America has grown strongly, but stagnated somewhat in advanced economies and emerging Europe, in part due to reduced foreign bank funding. A “search for yield” and substitution away from costly bank financing has boosted bond issuance by non-financial corporates in both advanced and emerging economies.*

## I. INTRODUCTION

1. *Toward achieving its shared objectives of strong, sustainable and balanced growth, the G-20 is devoting greater attention to investment and long-term financing issues. At Los Cabos, G-20 Leaders agreed to “intensify our efforts to create a more conducive environment for development, including supporting infrastructure investment.”<sup>2</sup> Many have noted that, in the wake of the crisis, underlying forces—such as “flight to safety” and bank deleveraging in advanced economies—may have affected the availability of affordable financing for investment in emerging economies. At the November 2012 Ministerial, G-20 members acknowledged the importance of long-term financing for jobs and growth and asked relevant International Organizations (IOs), including the IMF, to undertake further diagnostic work to assess factors affecting its availability.<sup>3</sup>*

2. *This note analyzes the impact of the crisis on investment and its financing from a macroeconomic standpoint. At a high level, it examines the relative recovery in investment across G-20 countries, including emerging members. The analysis also studies*

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<sup>2</sup> Communiqué of Meeting of G20 Finance Ministers and Central Bank Governors (Mexico City, November 5, 2012). <http://www.g20.org/load/780984360>.

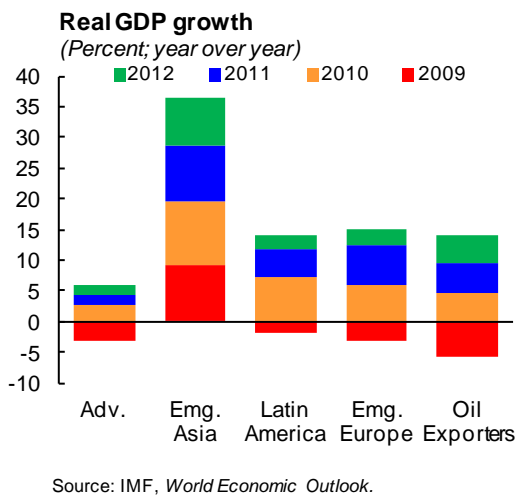
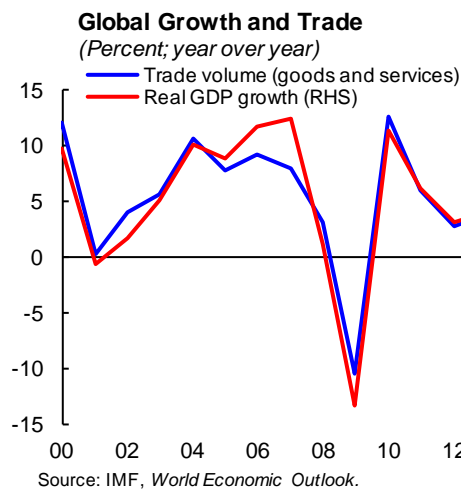
<sup>3</sup> For a more detailed discussion on infrastructure investment, see the umbrella report prepared by the World Bank with inputs from the IMF, OECD, UNCTAD, UN-DESA, and FSB.

macroeconomic sources of investment financing, including external financing and local financing through bank credit and capital markets.

## II. Background

3. *During the Great Recession, the global economy experienced its most severe and synchronized decline in activity since World War II. World output declined by 0.6 percent in 2009, compared with an average growth of about 4.0 percent between 2000 and 2008, and world trade volumes fell by more than 10 percent. So far, the recovery has been unusually uneven across advanced and emerging economies.*

- *In advanced economies, the recovery has been very weak. This likely reflects the legacies of the crisis and ongoing fiscal consolidation. Growth of both consumption and investment has been appreciably slower compared to past recoveries.*
- *In contrast, emerging economies have performed better than in past recoveries. Overall, emerging economies have witnessed strong growth, driven largely by buoyant consumption and investment growth, vibrant asset markets, strong capital inflows, and expansionary policies. Emerging Europe is a notable exception to these trends, having suffered a financial shock very similar to that experienced by many advanced economies.*



## III. INVESTMENT AND ITS FINANCING

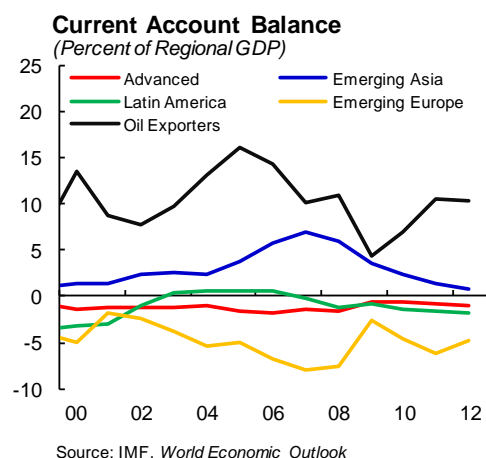
### Investment and Saving

4. *Similar to activity, investment developments have been markedly different across advanced and emerging economies, as well as within emerging economies. Investment in*

advanced economies fell sharply in the wake of the crisis (by more than 15 percent) and has recovered only very slowly thereafter due to several factors, including depressed demand, uncertainty, and weak growth prospects. As a result, it still remains below the pre-crisis level (by about 10 percent), leaving the investment-to-GDP ratio below the pre-crisis level by about 2.5 percentage points. In contrast, investment growth in emerging economies overall has increased during the crisis, largely driven by China. However, there have been appreciable differences in investment performance across regions (Figure 1). Specifically:

- In *emerging Asia*, investment has accelerated since the crisis, on the back of substantial fiscal stimulus, particularly in China. As a result, the investment-to-GDP ratio increased to about 41 percent from about 36 percent of GDP before the crisis.
- In *oil exporting countries*, investment stagnated with the collapse of the commodity prices in 2009–10, while it declined in *Latin America*. However, investment recovered strongly thereafter, supported by fiscal stimulus and a recovery of oil prices; and has significantly surpassed its pre-crisis levels.
- In *emerging Europe* the recovery in investment has been slow relative to other emerging economies. Accordingly, the investment-to-GDP ratio still remains below its pre-crisis peak by more than 2 percentage points. This slow recovery is partly due to the ongoing bank deleveraging in advanced Europe, which was an important source of investment funding before the crisis, as discussed below.

5. *From a saving-investment perspective, advanced economies have continued to rely on foreign saving, while emerging economies, on average, have generated positive net saving.* During the pre-crisis boom, advanced countries as a group relied on external funding to finance increasing investment needs while saving remained relatively stable. The current account deficit for G-20 advanced economies peaked at about 1¾ percent of their aggregate GDP in 2006. On the back of a large fall—and subsequent slow recovery—in investment, advanced economies’ needs for external financing declined by more than 1 percentage point of GDP after the crisis. In contrast, saving has exceeded investment in emerging economies, leading to them to export saving abroad. However, there are marked differences across emerging economies (Figure 2).



- Historically, saving in *emerging Asia* has been more than sufficient to finance high levels of investment, leading to large external surpluses. More recently, strong

investment growth has helped current account surpluses decline to less than 1 percent of GDP in 2012.

- *Latin America* relied on external funding for an extended period until the early 2000s due to low domestic saving. Domestic saving though outstripped investment during the strong commodity price boom in mid-2000s. However, since the crisis, reliance on foreign funding has increased.
- *Oil exporters'* saving behavior largely reflects oil-price developments. The current account surplus of oil exporters—currently in excess of 10 percent of GDP—is very similar to that observed during the pre-crisis period.
- The pre-crisis reliance of *emerging Europe* on external funding to finance strong investment and growth is well known. Low saving in the region was offset by large inflows of foreign capital, with large current account deficits peaking at about 8 percent of GDP in 2007. Although investment has declined significantly after the crisis, the region continues to rely on foreign funding due to its still-low domestic saving.

## External Financing

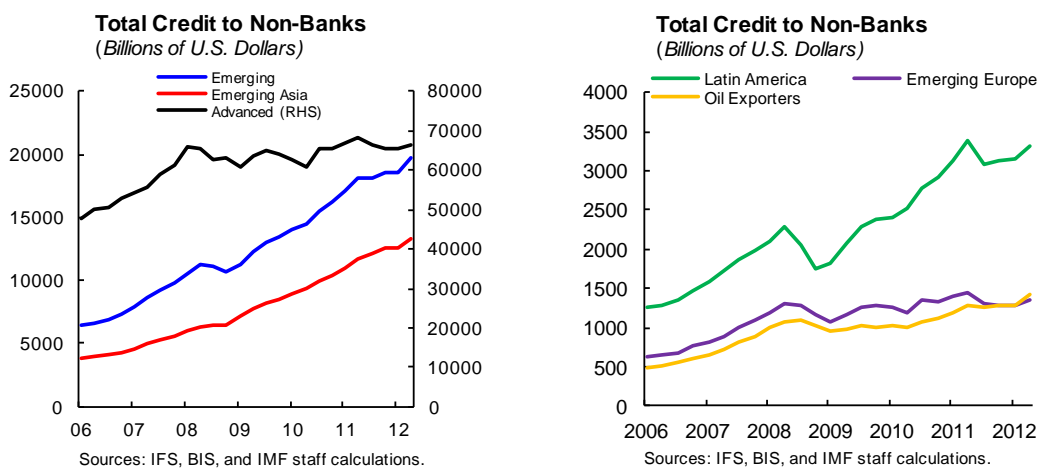
6. *With respect to the pattern of capital flows, surplus emerging economies have generally accumulated reserves, largely matched by net portfolio inflows in advanced deficit economies—who remain providers of direct investment abroad (Figure 3).*

- *Advanced economies* continue to export their funding in the form of direct investment. At the same time, to fill the gap between their saving and investment, they have counted on net portfolio inflows. Partly due to deleveraging pressures in the public and financial sectors, advanced economies' direct investment flows abroad have declined some, while external deficits narrowed and portfolio inflows declined.
- In the pre-crisis period, *emerging Europe* relied heavily on FDI and foreign bank funding to meet its large investment needs. However, with ongoing bank deleveraging in advanced economies, both FDI and bank funding inflows have dropped significantly, alongside a sizable narrowing of current account deficits (to about 5½ percentage points of GDP). At the same time, portfolio investment flows have picked up strongly in recent years.
- FDI flows to *Latin America* remained positive, on net, during the commodity price boom in the mid-2000s, with this trend continuing after the crisis. As the economies in the region recovered strongly, net portfolio investment flows have picked up, while reserve accumulation has also continued.

- *Emerging Asia and oil exporters* have continued to export their saving largely in the form of reserve accumulation, but at slower pace. At the same time, there have been steady capital inflows to emerging Asia, mainly in the form of foreign direct investment.<sup>4</sup>

## Financing through Banks and Capital Markets

7. *Bank credit in emerging Asia and Latin America has grown strongly, in line with strong investment.*<sup>5</sup> While total bank credit in advanced economies and emerging Europe has stagnated, credit in other emerging economies—in particular in emerging Asia and Latin America—has risen significantly.



8. *Borrowers' reliance on foreign bank credit (upstream exposure) has declined significantly in advanced economies and recovered strongly (or remained stable) in emerging economies.*<sup>6</sup> As of the second quarter of 2012, "upstream exposure" in advanced economies moderated to about 60 percent of foreign bank claims, while in emerging Asia, emerging Europe, and Latin America it was about 60, 50, and 40 percent, respectively (Figure 4). The evolution of upstream exposures across countries show that:

- Advanced economies, especially in the euro area periphery, experienced a significant fall in direct-cross border bank financing as the European banks deleveraged as well

<sup>4</sup> Within Emerging Asia, while capital flows to China have been relatively stable, the other countries experienced relatively large swings in FDI and portfolio flows after the crisis.

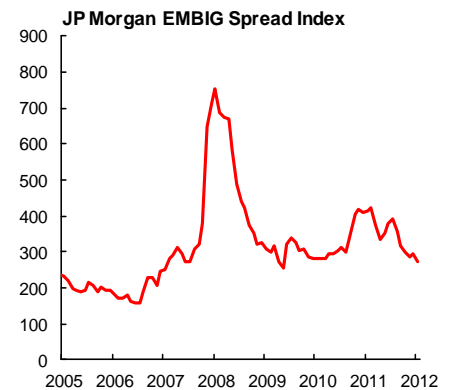
<sup>5</sup> Total bank credit to the nonbank sector includes credit by locally incorporated banks (both domestic and foreign owned) and direct cross-border credit.

<sup>6</sup> Borrowers' upstream exposure includes both direct cross-border lending by international banks and the proportion of lending by foreign affiliates that was not funded with local deposits. This better captures the size of foreign banking exposures than BIS foreign claims that add direct cross-border and foreign affiliates' claims.

as a decline in non-local deposit funded affiliates' claims with the onset of the crisis. There is still no sign of recovery in foreign bank credit as banks deleverage their exposures to these economies.

- Upstream exposure in emerging Europe has been relatively stable in part due to the Vienna Initiative—a framework to safeguard the financial stability of the region. However, it has declined since mid-2011 with the re-intensification of the financial crisis.
- Direct cross-border claims by foreign banks in emerging Asia and Latin America also fell sizably after the crisis but have since rebounded. In Latin America, foreign affiliates' claims based on non-local deposit funding have also recently increased, but their share of foreign affiliates' claims is still lower than in emerging Europe.

9. *Bond issuance by non-financial corporates has increased strongly in both advanced and emerging economies.* This has been supported by a “search for yield” and substitution for bank financing, which become more costly as banks continue to deleverage. In contrast, after some rebound, equity issuance declined significantly in all emerging country regions, while moving broadly sideways in advanced economies (Figure 5).



Sources: Bloomberg L.P.

## IV. CONCLUSIONS

10. *Recovery of investment has been uneven across regions.* Investment in many emerging economies has performed well since the crisis, but it has been relatively weak in advanced economies.

11. *From a macro standpoint, emerging countries, generally, have shown resilience in investment, supported by good policies but also strong credit growth.* FDI flows to emerging Asia and Latin America have remained broadly at pre-crisis levels, while net portfolio investment picked up on the back of relatively strong growth and low interest rates in advanced economies. Bond issuance has increased strongly, partly due to a search for yield. Total bank credit in emerging Asia and Latin America has also grown. However, domestic vulnerabilities could reemerge as several economies are already in a late-credit cycle. Thus, to guard against the associated risks, the general challenge for emerging economies is to rebuild their policy space.

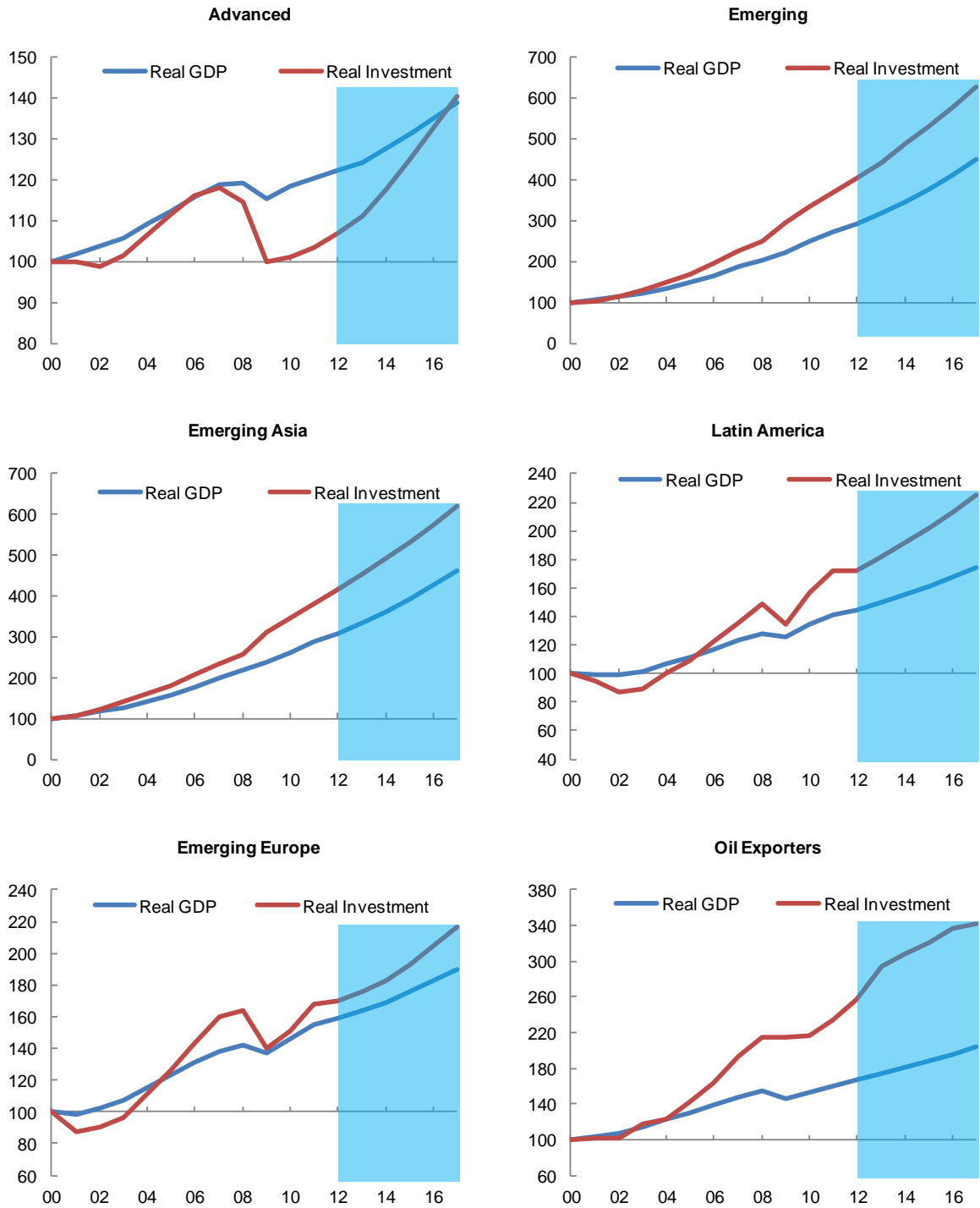
12. *Emerging Europe is an exception with sluggish investment.* The investment-to-GDP ratio here still remains below its pre-crisis peak. Reduced FDI and bank inflows have dampened investment activity, which had been reliant on external financing. Total bank

credit has stagnated, in part due to a decline in non-local deposit-based foreign banks' funding as bank deleveraging in advanced Europe has continued.

13. *In advanced economies several factors have hindered investment after the crisis.* Depressed demand, impaired financial sectors, and weak growth prospects have all weighed on capital spending. Foreign bank credit has declined significantly in advanced economies, particularly in the euro area periphery as cross-border deleveraging of European banks has been pronounced. IMF surveillance work suggests that financial fragmentation has hindered credit and raised financing costs in the euro area periphery. In advanced economies more generally, weak bank credit growth and tight lending standards have hurt investment, particularly in small and medium size enterprises. Other factors have also played a role, as investment has not been strong even for large companies with access to market financing. While further work is needed to pin down root causes behind low investment, the risk for these economies is that continuing sluggish investment may weigh down on potential output and growth over the medium term.

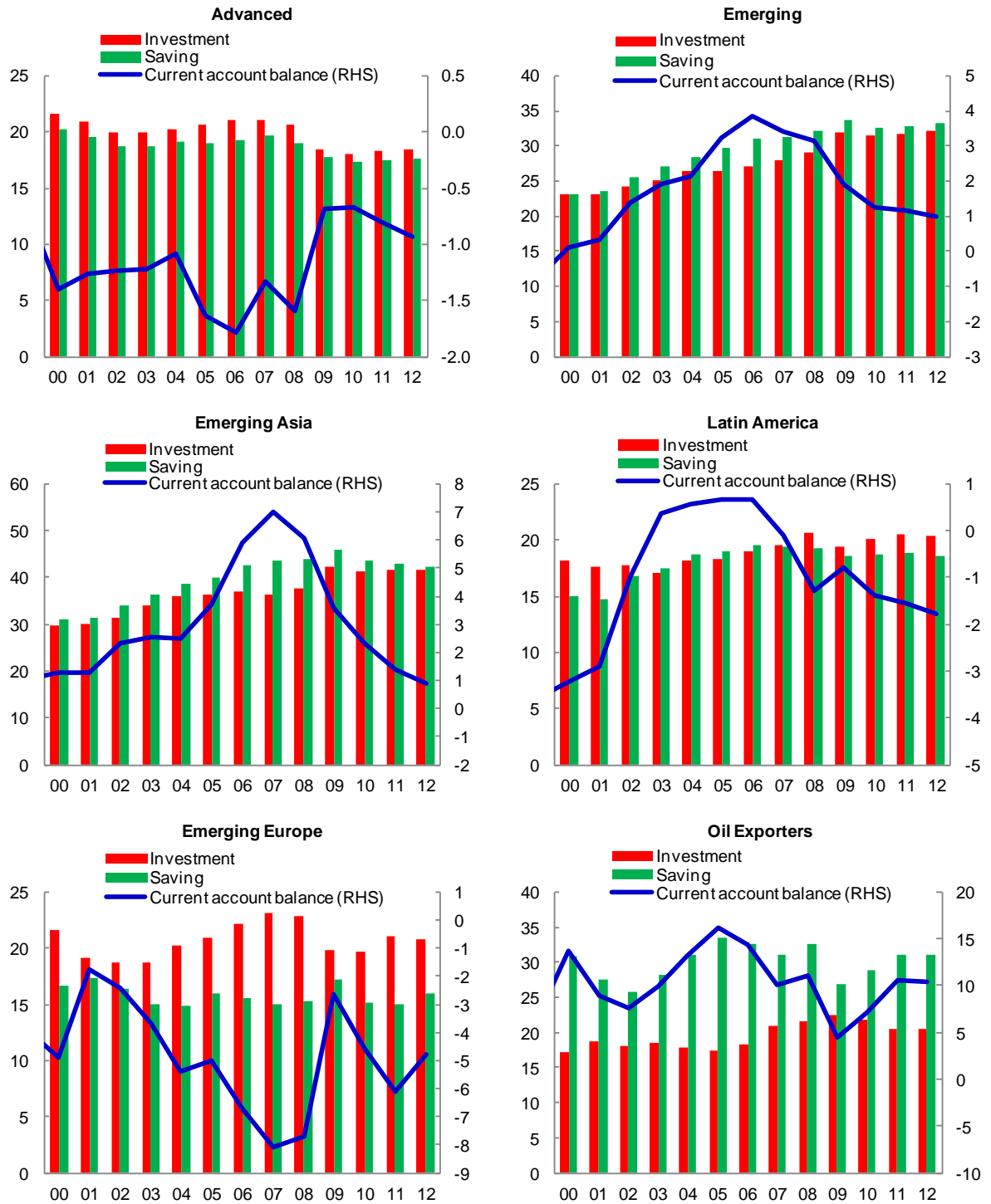


**Figure 1. G-20 Real GDP and Investment**  
*(Index; 2000=100)*



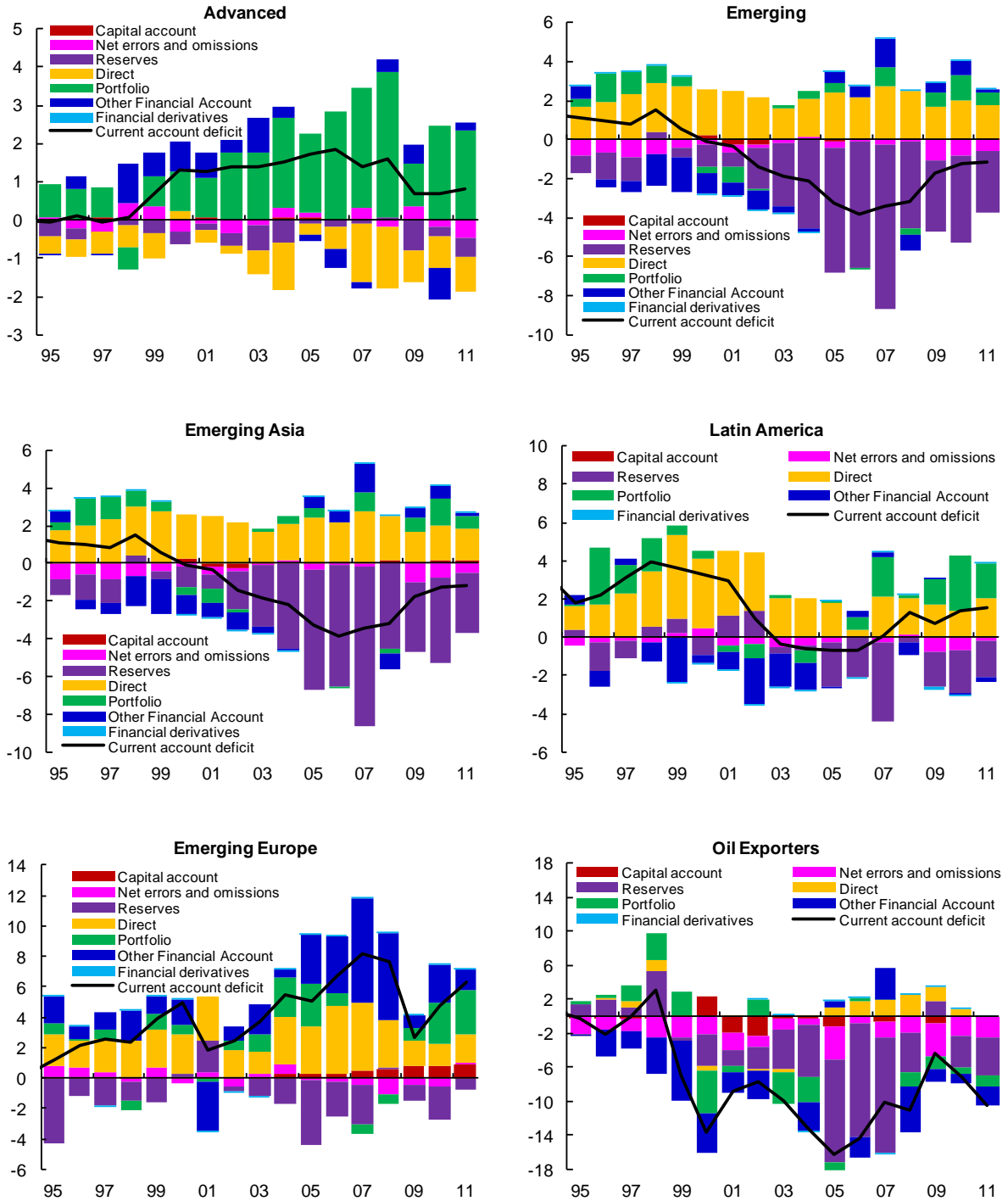
Source: IMF, *World Economic Outlook*.

**Figure 2. G-20 Domestic Savings and Investment**  
(Percent of GDP)



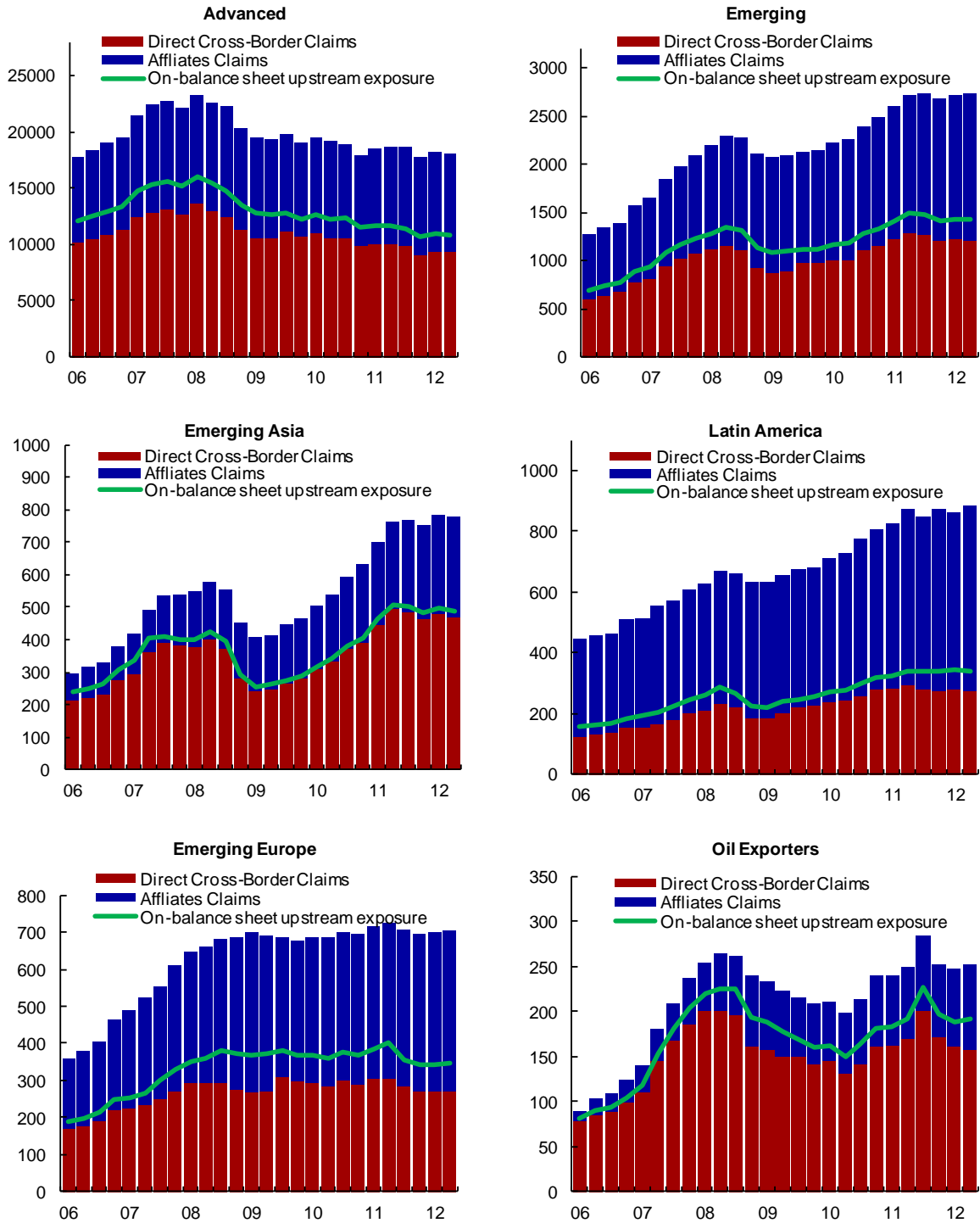
Source: IMF, *World Economic Outlook*.

**Figure 3. G-20 External Financing**  
(Percent of GDP)



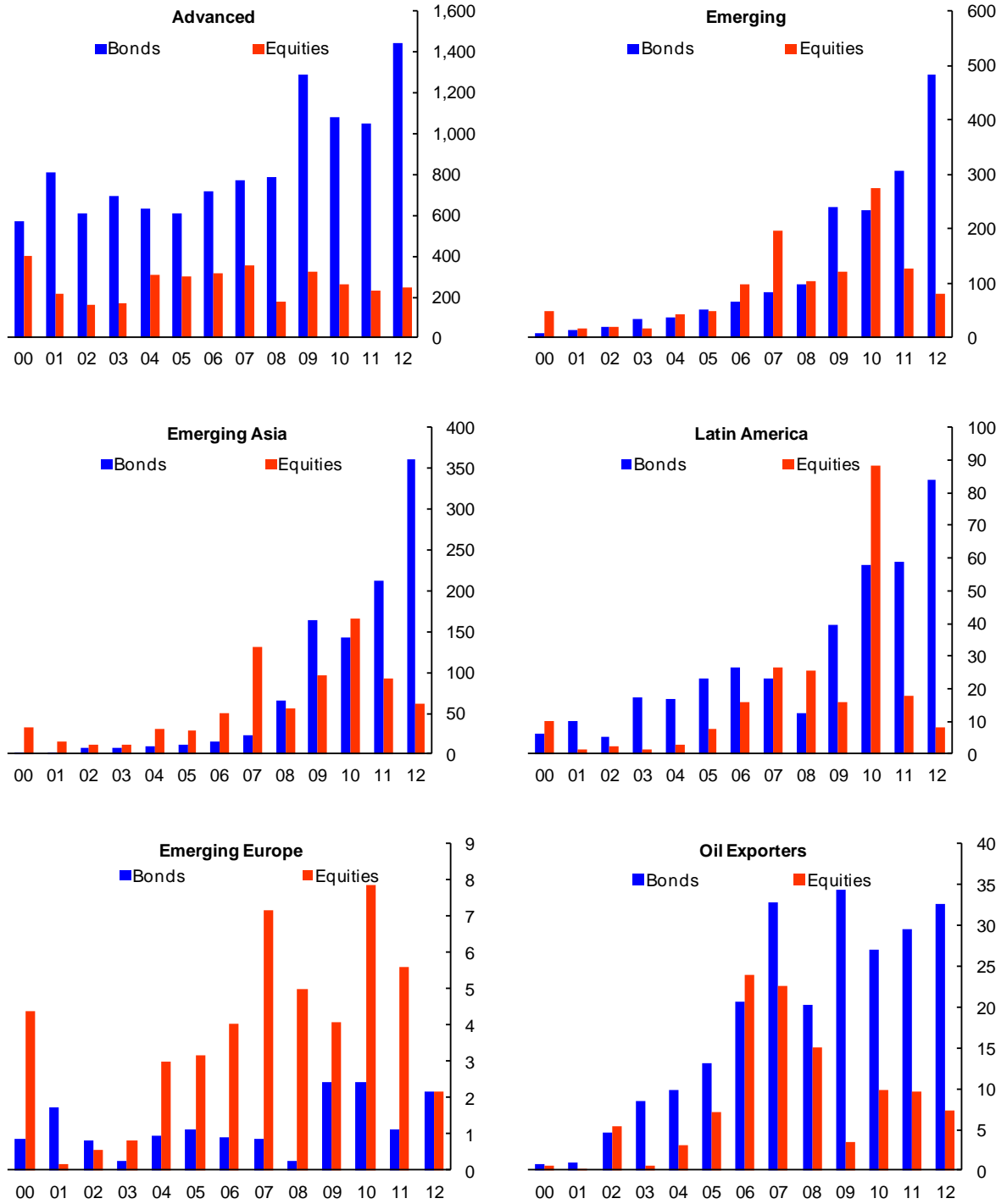
Sources: IMF, *Balance of Payment Statistics*; IMF staff calculations.

**Figure 4. G-20 Banks' Foreign Credit**  
(Billions of U.S. Dollars)



Sources: BIS; IFS, ECB, Bankscope, and IMF staff calculatons.

**Figure 5: G-20 Equity and Bond Issuance by Non-financial Corporate**  
*(Billions of U.S. Dollars)*



Source: Dealogic.