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Policy Responses to the Global Financial Crisis: What Did Emerging Economies Do Differently?

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Abstract

In contrast to the past, many emerging countries faced the global financial crisis of 2008-2009 with more solid financial positions and the required credibility and capacity to conduct countercyclical policies. This allowed them to better cope with the global downturn and thus behave more similarly to developed countries. This paper documents the policy responses and discusses other factors that allowed emerging countries to partially absorb the negative external shock. In particular, it characterizes (i) monetary and exchange rate policies, (ii) fiscal policy, and (iii) external and domestic financial positions.

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1. Introduction

The global economic crisis that began in 2008 was one of the largest and deepest crises the world has gone through since the Great Depression. Even though countries across all regions and income levels were deeply affected by the 2008-09 downturn, the popular perception has been that emerging economies contracted substantially less on average than advanced economies (see, for example, Eichengreen, 2009). This perception is related to findings of a negative association between some indicators of economic performance during the crisis and the level of GDP per capita (see, for example, Claessens, Dell’Ariccia, Igan, and Laeven, 2010; Frankel and Saravelos, 2012; Lane and Milesi-Ferretti, 2011; Rose and Spiegel, 2010a, 2010b, and 2010c; and Rose, 2011). Most of these studies have generally focused on the change in the income level (i.e. GDP growth) as an indicator for economic performance. However, this type of analysis largely ignores convergence considerations: developing countries generally tend to grow faster than developed countries.

Didier, Hevia, and Schmukler (2012) focus instead on the second-order difference of income level, or *changes* in real GDP growth rates. Such an analysis allows the authors to assess the effects of the global crisis on real income while taking into consideration emerging economies’ typically higher growth rates (relative to developed countries). As a result, some interesting evidence arises. Although emerging economies performed better during the global crisis vis-à-vis advanced countries when focusing only on growth rates, they actually showed similar growth contractions when changes in real GDP growth are considered. Nonetheless, the authors find that emerging economies recovered faster and more strongly than advanced countries, returning to higher growth rates more quickly. While, on average, emerging economies performed better in the expansionary phase of the business cycle than advanced countries, there was a considerable heterogeneity among them. Eastern Europe and Central

Asia fared the worst, whereas low-income countries, appearing to be more isolated from the global shock, were the least affected ones.

Four factors can be associated with the differentiated post-crisis behavior of emerging market countries, relative to their past and to advanced economies. The first and most obvious one is that the root of the problem was in the financial markets of advanced countries and that developing countries had a low exposure to these markets relative to other developed countries. At the same time, the financial collapse hit highly leveraged consumers in some developed countries, while consumption was posed to continue growing at a high rate in emerging countries.

The second reason is related to one of the main crisis transmission channels, namely international trade. As the U.S. economy came to a standstill in the fourth quarter of 2008, firms stopped their international orders anticipating an accumulation of inventories (due to the orders already being processed and shipped). This generated an immediate collapse in production in several emerging economies focused on supplying manufactures to the world economy. As inventories started to decrease and it became more likely that global demand would stabilize and the crisis would not be transmitted in full to emerging economies, firms reignited the production process and overall economic activity in emerging markets picked up. Emerging economies were thus able to ignite a faster recovery than developed countries (for which manufacturing accounts for a smaller share of total activity).

The third reason is relate to the convergence dynamics. To the extent that emerging economies grow at a faster pace than advanced economies, and hence follow a path to become richer nations, a recovery of their growth trajectory would make their output converge sooner to the pre-crisis levels.

The fourth reason for the robust post-crisis performance of emerging economies, at least relative to their previous history, is a fundamental change in the way emerging countries

have conducted their policies in the recent past. The behavior of emerging countries around the global crisis might have come as a surprise given their previous experiences during turmoil periods, when foreign shocks tended to end up as full-blown domestic crises. However, as opposed to previous crises, the resilience of countries to the 2008–09 crisis might be partly attributed to a combination of sounder macroeconomic and financial policy frameworks and a shift towards safer domestic and international financial stances. For instance, a change in the policy stance have taken place in the late 2000s (Gourinchas and Obstfeld, 2012; Kose and Prasad, 2011). More countercyclical policies were in fact pursued not only during, but also before the global crisis. The global crisis thus found many emerging countries with more fiscal space, better balance sheets, and the required credibility to conduct expansionary fiscal and monetary policies. In this short paper, we document this shift in the policy response of emerging economies to the global financial crisis. We argue that the economic downturn of 2008-2009 found most emerging countries with more solid fiscal, monetary, and financial positions, which, together with their acquired credibility, allowed them to pursue more countercyclical policies in order to counteract the global shock. We complement the analysis in Didier, Hevia, and Schmukler (2012) by building up on their results, using different graphs and evidence and providing additional anecdotal accounts of the policies pursued.

The rest of the paper is organized as follows. Section 2 outlines the common ground for the subsequent analysis by revisiting some aggregate measures of growth collapse and growth recovery during the global crisis across countries in different income groups. Section 3 presents the core discussion of this paper on the policy responses of emerging economies to the 2008-2009 external shock. In particular, we characterize the policies emerging markets have adopted to become more resilient to crises and how these policies may have played an important role during the global crisis. Section 4 concludes.

2. Performance during the 2008–09 crisis

In this paper, we argue that the change in emerging economies' policy responses has been an important factor behind the perceived improvement in their economic performance during the global financial crisis, both with respect to their own past and relative to more advanced regions. This section thus motivates the policy analysis of Section 3 below by characterizing the performance of advanced and emerging economies during the 2008-2009 crisis. It documents the extent of the growth collapse of emerging countries and their subsequent recovery. In particular, we provide some graphical evidence based on Didier, Hevia, and Schmukler (2012). We first revisit the claim that emerging countries fared substantially better than advanced countries during the downturn phase of the crisis. We then show that the post-crisis recovery was indeed stronger and faster in emerging countries.

2.1. Performance during the downturn

As discussed above, recent research suggests that emerging countries fared substantially better than advanced countries during the downturn phase of the crisis. The empirical evidence shows that countries with higher GDP per capita experienced lower GDP growth in the aftermath of the global crisis.¹ For instance, during 2009 emerging and low-income countries grew respectively 0.8 and 4.5 percent on average, significantly higher than the -3.5 percent growth rate observed in advanced countries (top panel of Figure 1).² These statistics, however, hide the extent of growth deceleration during the crisis. When the cross-country performance is compared through growth collapses, defined as real GDP growth in 2007 minus real GDP growth in 2009 measured in percentage points, different patterns emerge.

¹ See Claessens, Dell'Ariccia, Igan, and Laeven (2010), Frankel and Saravelos (2012), Lane and Milesi-Ferretti (2011), and Rose and Spiegel (2010a, 2010b, and 2010c).

² Throughout this section, each country's observation within each group is weighted by its 2007 level of GDP measured in US\$.

The top panel of Figure 2 shows that growth collapses were actually slightly larger in emerging economies relative to advanced countries, 6.9 versus 6 percentage points respectively.³ This greater degree of cross-country similarities stands in sharp contrast to the standard belief that emerging economies were less affected by the global downturn than the group of advanced countries. Low-income economies, however, seem to have weathered the crisis the most unscathed, with a decline in GDP growth of just 3.2 percentage points.

The top panel of Figure 3 shows a geographical parsing of the collapse in real GDP growth between 2007 and 2009. Latin America and the Caribbean and Eastern Europe and Central Asia experienced greater growth collapses than those observed in advanced countries (-7.7 and -12.4 percentage points, respectively, in comparison to -6 percentage points). Although growth collapses were somewhat smaller in Asian countries and Middle East and African countries (-4.5 and -4.2 percentage points, respectively), these still imply significant declines in GDP growth rates. Again, most of the relatively few countries with a higher growth rate in 2009 than in 2007 were low-income countries. All in all, the deceleration in growth observed in 2009 was highly uniform across this wide set of emerging economies.

Didier, Hevia, and Schmukler (2012) show in fact a statistically significant U-shape pattern for the relation between growth collapses and income per capita. This observation supports the claim that the largest growth collapses did not occur in the richest countries. In fact, a linear regression of growth collapse on the logarithm of GDP per capita for those countries with GDP per capita above US\$ 8,000 shows a slightly positive coefficient, though not statistically different from zero. Therefore, if anything, richest countries tended to have smaller, not greater growth collapses. Furthermore, regressions of growth collapse on income dummies show no statistically significant difference between advanced and emerging economies, but they do confirm that low-income countries did suffer smaller collapses. These

³ If simple averages are used instead, advanced economies actually have greater collapses. However, the difference in growth collapses between advanced and emerging economies is not statistically different from zero.

findings stand in contrast with the cross-country economic performance during previous turmoil episodes, particularly during the Russian/Asian crises of 1997–98. During these crises, emerging and low income economies across all geographical regions suffered very large growth collapses, while advanced countries suffered only modest growth decelerations.

These findings suggest that, within the group of financially and trade integrated countries, the systemic and global dimensions of the crisis dominated country-specific strengths, leading to a highly synchronized and homogeneous deceleration of growth. Indeed, a geographical clustering of countries supports this argument, as no financially integrated emerging region was immune to the global crisis. On the other hand, the typically lower degree of integration of lower-income countries might have played a role in isolating their economies from the external shock, due to the weaker channels of shock transmission, and thus resulted in smaller growth collapses.

2.2. Performance during the recovery

There was a greater degree of heterogeneity in the recovery process from the global downturn experienced throughout 2008-09. In this expansionary phase of the business cycle, emerging economies indeed showed a more robust rebound relative to advanced economies. Perhaps the most striking feature of the global recovery was the strength with which emerging economies resumed their high growth rates. Moreover, the recovery in the global economy was not driven solely by the rich countries, as in previous episodes of global turbulence. Heterogeneity in the upturn was also observed across emerging regions. Overall, this evidence supports the claim that emerging countries' individual strengths were relevant in the recovery process as the full blown effects of the systemic shock faded. We will further expand this argument in Section 3.

On average, there was a large bounce-back effect in economic activity. Countries that suffered greater growth collapses were also the ones that enjoyed larger growth recoveries. The bottom panels in Figures 2 and 3 show our measure of growth recovery, defined as GDP growth in 2010 minus GDP growth in 2009 measured in percentage points. A mirror-like pattern emerges when comparing the top and bottom panels of these two figures.

It is worth pointing out that even though growth recoveries across emerging and advanced economies show a similar acceleration in growth rates following the collapse (lower panel of Figure 2), emerging economies returned to GDP growth rates higher than those in advanced countries. When looking at post-collapse growth rates of GDP (bottom panel of Figure 1), GDP figures show an average growth rate of more than 6.5 percent (5.7 percent) in 2010 (2011) for emerging economies versus only 2.6 percent (2.2 percent) for advanced countries. In the case of low-income economies, while they show a mild recovery, this is due to a small collapse during the downturn phase of the cycle, which implies that overall they managed to maintain relatively high growth rates.

Despite this bounce back effect, there was substantial heterogeneity in the recovery process across countries, as shown in the bottom panel of Figure 3. This evidence implies that not all countries had recovered by 2010 or 2011 all the losses derived from the crisis. One, albeit imperfect, way of analyzing this hypothesis is assessing whether countries have recovered to a reference *level* of economic activity. To this end, we consider two reference levels of GDP: (i) the GDP level that was reached in 2008 (i.e., the pre-crisis annual peak) and (ii) the level that would have been reached in 2010–11 had countries maintained the average growth rates that they had registered in the 2000–07 period. The latter reference level is an estimate of trend GDP.

Consider first the actual levels of GDP in 2010–11 relative to those in 2008 (top panel of Figure 4). In 2010, the average levels of GDP in advanced countries and in Eastern Europe

and Central Asia remained below their 2008 levels, by -1 and -1.6 percent, respectively. In contrast, the GDP of the remaining developing regions comfortably exceeded that of 2008 by 2010. By 2011, all regions exceeded their 2008 GDP levels, although with substantial heterogeneity: at one extreme, the 2011 level of GDP in Asia was over 23 percentage points above its 2008 value; at the other extreme, GDP in advanced countries was just 1.2 percentage points above its 2008 value.

Similar cross-country patterns emerge if the comparisons are made against the GDP level that would have been achieved had the crisis not taken place and had countries continued to grow at the average rates they achieved in the 2000–07 period (lower panel of Figure 4). The difference between actual GDP and the counterfactual GDP levels is a rough measure of the output cost of the global crisis. By far, the region most affected by the global crisis was Eastern Europe and Central Asia, whose actual GDP levels were about 14 and 16 percent below trend in 2010 and 2011, respectively, should the crisis had never happened.

Lastly, as a complement of the above results, Didier, Hevia, and Schmukler (2012) look at monthly data on industrial production, which allow an assessment of the duration of the recession to a greater detail than possible by an analysis using data at an annual frequency. Similar patterns to the one shown here arise. The collapse in industrial production growth rates relative to their pre-crisis counterparts was similar in emerging and advanced countries, whereas low-income countries suffered relatively smaller decelerations. Industrial production, however, recovered more strongly in emerging economies than in advanced ones. Emerging economies witnessed in fact growth rates in industrial production even higher than their pre-crisis rates, allowing them to recover part of the lost ground. Furthermore, emerging economies started to recover earlier than advanced economies. For example, the recessionary phase of the business cycle lasted on average 9 months for emerging economies and 13 months for advanced countries. Moreover, by November 2009 emerging countries had

achieved their pre-crisis levels of industrial production, while advanced countries were still well below their pre-crisis levels by December 2010.

3. Resilience and policy responses to the crisis

As mentioned above, the distinct growth patterns observed in emerging economies during the 2008-09 global crisis stand in contrast with those observed in previous crises. Interestingly, these aggregate patterns indicate that the regions that suffered smaller output losses, as defined by the different measures in Section 2, were those that faced the global crisis with better macroeconomic fundamentals and that were able to perform countercyclical policies. In this section, we argue that more robust fiscal, monetary, and financial positions in fact let emerging countries change their policy response to the global crisis, thus making them more resilient to external shocks and allowing them a better performance amid turmoil in the world economy. We document here this break in the policy response, complementing the evidence in Didier, Hevia, and Schmukler (2012). We show that, during and after the crisis, emerging economies were able to conduct countercyclical policies targeted at mitigating its impact, hence behaving more similar to developed economies.

In previous crises episodes, the typical emerging country was caught with substantial macroeconomic and financial vulnerabilities that compelled them to respond procyclically by raising interest rates, cutting fiscal spending, or raising taxes to contain—although not always successfully—capital outflows and depreciation pressures on nominal exchange rates.⁴ In contrast, when the global financial crisis of 2008-09 hit, many emerging countries had acquired the required credibility and space to conduct countercyclical monetary and fiscal policies, which allowed them to at least partially offset the global shock. Several factors were particularly important in creating buffers between the external conditions and the local

⁴ Kaminsky, Reinhart, and Vegh (2004) document that emerging economies typically follow pro-cyclical policies, in both good and bad times. Reinhart and Reinhart (2008) argue that the lack of access to world capital markets during turbulent times may hamper the ability of governments to conduct countercyclical fiscal policies.

economy during late 2008 and early 2009. Broadly speaking, these factors include developments in (i) monetary and exchange rate policies, (ii) fiscal policy, and (iii) overall external and domestic financial positions.

3.1. Monetary and exchange rate policy

A key feature of emerging countries' enhanced reaction to the global crisis was their broader room to carry out counter-cyclical monetary policy measures. During previous turmoil periods, governments were forced to increase their interest rates to contain capital flight, currency runs, and international reserve losses. This time, the recently acquired credibility and institutional capacity of their central banks was an essential asset, which allowed them to conduct an active countercyclical monetary policy when the world economy came to a halt.

Table 1 shows the dynamics of money market interest rates during the Mexican, Asian, Russian, and global crises, across countries in Asia, Eastern Europe and Central Asia, and Latin America and the Caribbean. The top left panel displays the difference between average interest rates during the 12 months before and after a number of crises. For example, during the 1994 Mexican crisis, Asian and Latin American countries had to increase their interest rates, while during the 2008-09 crisis, these regions were actually able to decrease them. Notice that while countries in Eastern Europe and Central Asia were able to reduce interest rates during the Mexican crisis, money market interest rates increased considerably during the 2008-09 crisis.

The lower left panel of Table 1 shows similar patterns, but focuses on the percentage difference between the peak and the trough for exchange and money market rates in a given crisis window. Once more, Asian and the Latin America and the Caribbean countries reduced the level of their money market rates during the crisis, contrary to the observed trends in the previous episodes in our sample.

The exchange rate regime was a key factor that contributed to the ability of emerging economies to lower interest rates. With the exception of Eastern Europe, most financially globalized emerging economies had put in place more flexible exchange rate regimes, especially in the aftermath of the emerging market crises of the late 1990s. This movement was feasible for at least two reasons: first, central banks became more independence and improved their credibility and institutional capacity; and second, these countries were able to reduce currency mismatches in the government and private sectors' balance sheets through the deepening of local currency debt markets. The latter implies that exchange rate fluctuations have less adverse balance sheet effects. As a result of these more flexible regimes, exchange rates were allowed to depreciate significantly in 2008 thereby cushioning the global shock and, at the same time, helping mitigate the deterioration of the external balance. Moreover, flexible exchange rates reduced concerns of depletion of international reserves related to currency runs, typical of fixed exchange rate regimes.

Table 1 shows the behavior of exchange rates across a number of international crises over the past two decades. While the rates of exchange rate depreciation, measured as the difference between the pre- and post-crisis average, were sizeable during the global crisis, these were still much lower than the depreciation rates observed during the Mexican, Asian, and Russian crises. Similar results are obtained when measuring the rate of depreciation as the percentage change between the peak and the trough. In this case, the difference in patterns between the global crisis and past crisis episodes is even starker, with depreciation rates during the global crisis of around 40 percent, compared to previous depreciations in the order of 200 percent. While currency depreciations during past crises were arguably not a choice for many countries, those depreciations observed during the global crisis can be in many cases interpreted as conscious policy decisions.

3.2. Fiscal policy

Another important element which contributed to emerging economies' resiliency to the global crisis was their stronger fiscal positions, at least relative to their past. Improved fiscal stances across many emerging countries previous to the crisis allowed them to acquire enough fiscal space to design and implement packages to counteract the contraction in the world economy. Figure 5 shows a measure of fiscal space developed by Aizenman and Jinjarak (2010) across income groups and regions. This measure, defined as total public debt divided by the average tax revenue during 2000–07, captures the number of tax years required to fully repay the outstanding stock of public debt, assuming that all revenues are assigned to this purpose. Interestingly, the figure shows that, during the global crisis, emerging and low income regions (particularly Eastern Europe) had more fiscal space than advanced countries. This higher fiscal space provided emerging economies with room to perform countercyclical fiscal policies.

Indeed, many emerging economies announced strong countercyclical fiscal policies around 2009 and 2010, as shown in Figure 6. These packages were at times even larger than those in several advanced countries. This strong expansion in fiscal spending in emerging countries contrasts with the usual fiscal consolidations observed during previous turmoil periods. As shown by Kaminsky, Reinhart, and Vegh (2004), emerging countries have typically followed (or have been unable to avoid) procyclical fiscal policies in the past, particularly so during crisis episodes.

3.3. Financial factors

Finally, two key developments related to emerging economies' financial standing helped them reduce their vulnerabilities to external shocks. First, many countries managed to improve their current account positions, thereby becoming less dependent on foreign

financing. Second, and perhaps more importantly, many emerging economies steadily changed the structure of their external assets and liabilities, making the external balance sheet effects work in their favor this time around. These two factors contributed to the build up over the years of stronger financial positions, which provided a much needed cushion when the crisis hit.

Figure 7 shows the average current account balances across emerging and low-income countries of the different geographical regions as well as advanced economies over the past two decades. While current account balances deteriorated on average for advanced economies in the 2000s vis-à-vis the 1990s, they actually improved throughout the developing world, thus depending less on foreign financing. Most noticeably, reversals from deficit to surpluses took place in countries in Asia, Easter Europe and Central Asia, and in the Middle East and North Africa. The improvement in current account balances of commodity exporting emerging economies in the latter period was partly driven by major terms-of-trade improvements in the wave of the soaring commodity prices in the second half of the 2000s, as shown in the bottom panel of Figure 7.⁵

Regarding the second factor, Figure 8 shows the evolution of net foreign assets across regions. A steady change in the structure of external assets and liabilities across emerging economies has taken place, and particularly so during the 2000s. There was a switch of foreign liabilities from debt to equity, while debt assets in foreign currency were accumulated to levels that exceeded foreign debt liabilities. As exchange rates of emerging economies depreciated amid turmoil in the global economy in the second half of 2008, the local currency value of their external assets increased, while that of their debt liabilities shrunk. In addition,

⁵ Figure 7 also shows sinking commodity prices throughout 2008. The trade channel of contagion lies behind these patterns: during the turmoil period, global demand plummeted, driving down the price of commodities and leading to a drop in trade volumes. This transmission channel may be part of the explanation behind the more severe contractions observed in more export-dependent countries, such as those in East Asia. See Didier, Hevia, and Schmukler (2012) for more discussion on the trade and financial transmission mechanisms during the global crisis.

the collapse in economic growth and in equity prices also contributed to the contraction of the local currency value of equity liabilities. In this context, emerging economies were not only able but also willing to let their currencies depreciate, precisely because the new structure of foreign assets and liabilities did not raise concerns of negative balance sheet effects.

In contrast to these patterns, developed countries increased their debt liabilities vis-à-vis emerging countries, in part reflecting the large debt flows used to finance the U.S. current account deficit. At the same time, advanced countries became net claimants on emerging countries on the equity side.

The other side of the coin of this safer form of international financial integration of emerging economies was the accumulation of international reserves, which picked up dramatically in the emerging world since the Asian and Russian crises of the late 1990s (international reserves are equivalent to the vertical distance between the black and grey lines in Figure 8). Reserve accumulation served two purposes in emerging countries: first, it slowed down the appreciation of domestic currencies during the pre-crisis expansionary period; and, second, it served as a self-insurance mechanism during the crisis, deterring currency and banking panics. In fact, when the global crisis erupted, many emerging economies held international reserves in excess of their stock of short-term foreign liabilities, which eliminated concerns about debt rollover difficulties, thus giving investors fewer incentives to attack domestic currencies. International reserves also gave central banks a significant room to contain the depreciation of their currencies during the crisis.

Another important factor underlying the willingness to allow exchange rates to depreciate was the shift in emerging country borrowing from foreign currency towards domestic currency (Figures 9 and 10). This change in the denomination of debt has minimized the negative balance sheet effects typical of previous crises, when devaluations led to debt overhang problems. Furthermore, some emerging countries were able to increase

the average maturity of domestic and international private debt, thus reducing concerns about debt rollover difficulties (Figures 11 and 12). For example, relative to the 1990s, countries in the Latin America and the Caribbean region have been able to increase the average maturity of international debt from 5.4 years to 7.7 years. One has to bear in mind, however, that the increase in maturity was not homogeneous across regions, as can be observed in the lower maturity of international private debt in the Middle East and Africa region.

The soundness of domestic financial sectors also improved in several emerging countries due to better regulation and supervision, more prudent practices by financial intermediaries, and abundant local liquidity. When the international wholesale interbank market dried up in the last quarter of 2008, banks that relied more on this short-term wholesale market were hit harder and suffered rollover problems (Raddatz, 2010). Thus, even as the external environment deteriorated sharply, local financial systems remained on sound footing and depositors did not flee the domestic banking system (unlike during previous crises). Perhaps for the first time in recent decades, the domestic financial systems of many emerging countries at least did not amplify the shock emanating from the international financial system.

4. Conclusions

When the panic erupted in 2008 with the collapse of Lehman Brothers, a crisis of global proportions ensued. Most countries around the world were largely hurt as a consequence. While the available literature on the subject has generally stressed the resilience of emerging economies by noting their fairly higher GDP growth rates relative to advanced countries, Didier, Hevia, and Schmukler (2012) challenge this conception. Growth rates in emerging countries declined as much as those in advanced economies, though they fell by much less

than observed during past global turbulence periods. In other words, if post-crisis growth dynamics are analyzed *relative* to pre-crisis ones, different patterns emerge.

As the downward momentum began to fade and global demand started to pick up, most countries recovered most lost ground in their growth paces. In this respect, emerging economies were indeed more resilient this time around, not only relative to advanced economies, but also, and particularly so, with respect to their own pasts. Nonetheless, there was a greater degree of heterogeneity in the recovery process from the global downturn experienced throughout 2008-09. In this expansionary phase of the business cycle, emerging economies showed a more robust rebound relative to advanced economies. Overall, the evidence supports the claim that emerging countries' individual strengths played an important role in the recovery process as the full blown effects of the systemic shock faded.

There are several potential explanations for this resiliency of emerging economies relative to not only advanced economies, but also relative to their past. On the one hand, a few circumstantial factors stand out. Consumers in developed countries, being at the epicenter of the crisis, were severely hit by it, whereas consumers in emerging economies were affected by the downturn mostly in indirect ways. Moreover, as global demand picked up, emerging economies, typically more oriented to manufactures, managed to resume their activity faster and thus provided much needed vigor to their local economies.

On the other hand, and in contrast to the past, the charging columns of the crisis were met by stronger defensive garrisons throughout the emerging world. Improved regulatory and financial frameworks, more robust balance sheets stemming from a safer international financial integration, stout buffers of international reserves, and an overall sounder macroeconomic position supported increased confidence in the economy, which contributed at least in part to avoid banking or currency panics. Flexible exchange rate regimes and

robust fiscal stances afforded governments in many emerging countries a larger room to conduct monetary and fiscal countercyclical policies.

While these are good news, much work is still needed ahead if emerging economies are to continue on a successful development path. Increasing financial globalization opens the door to augmented exposure to external shocks, which need to be dealt with the consolidation of regulatory frameworks and system-wide safeguards. At the same time, countercyclical policies entail pecuniary and opportunity costs that must be assessed from a broad perspective while keeping short-sightedness at bay. Overall, and ahead of the crises stubbornly looming in the future, the achieved milestones are however certainly encouraging.

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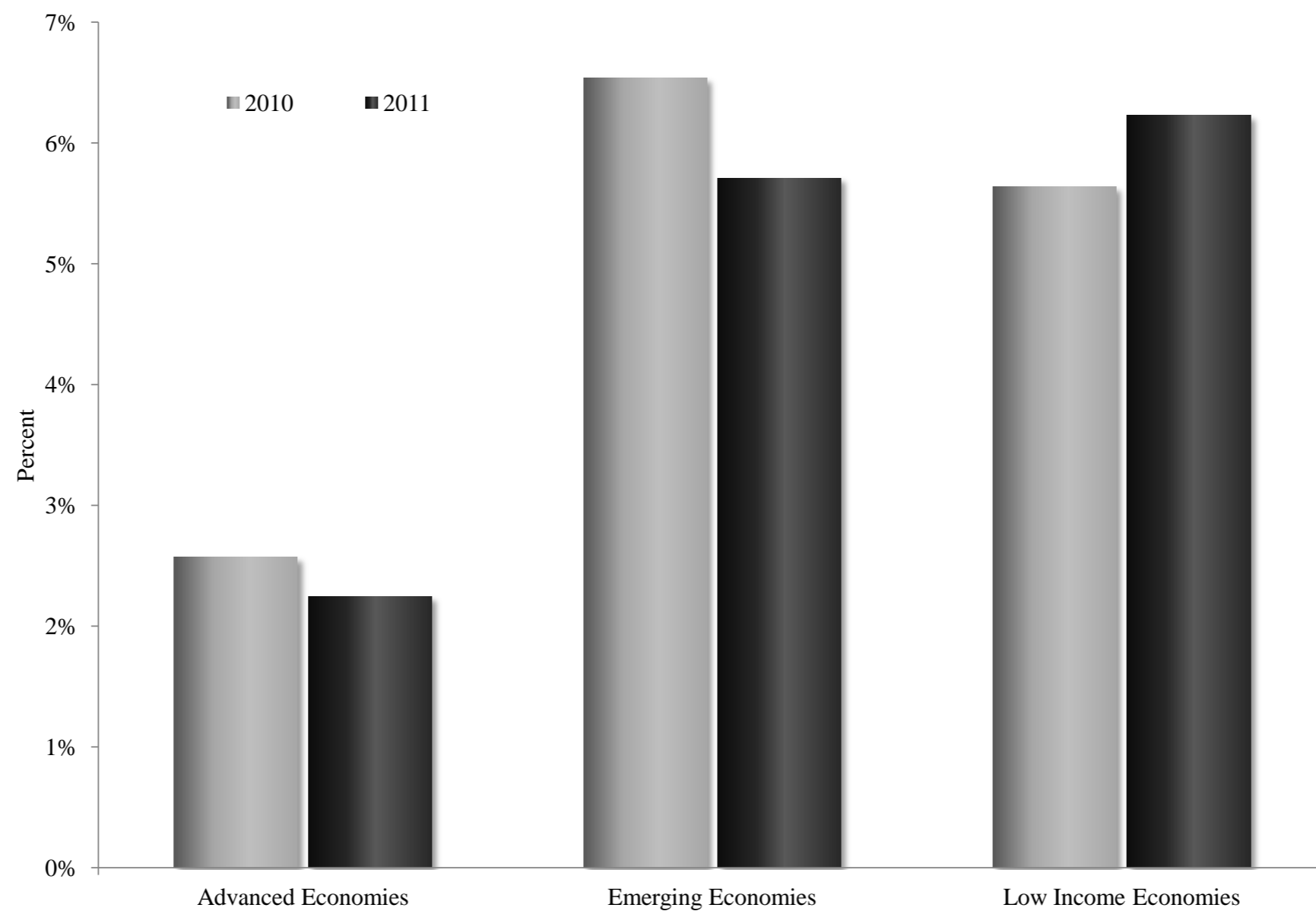
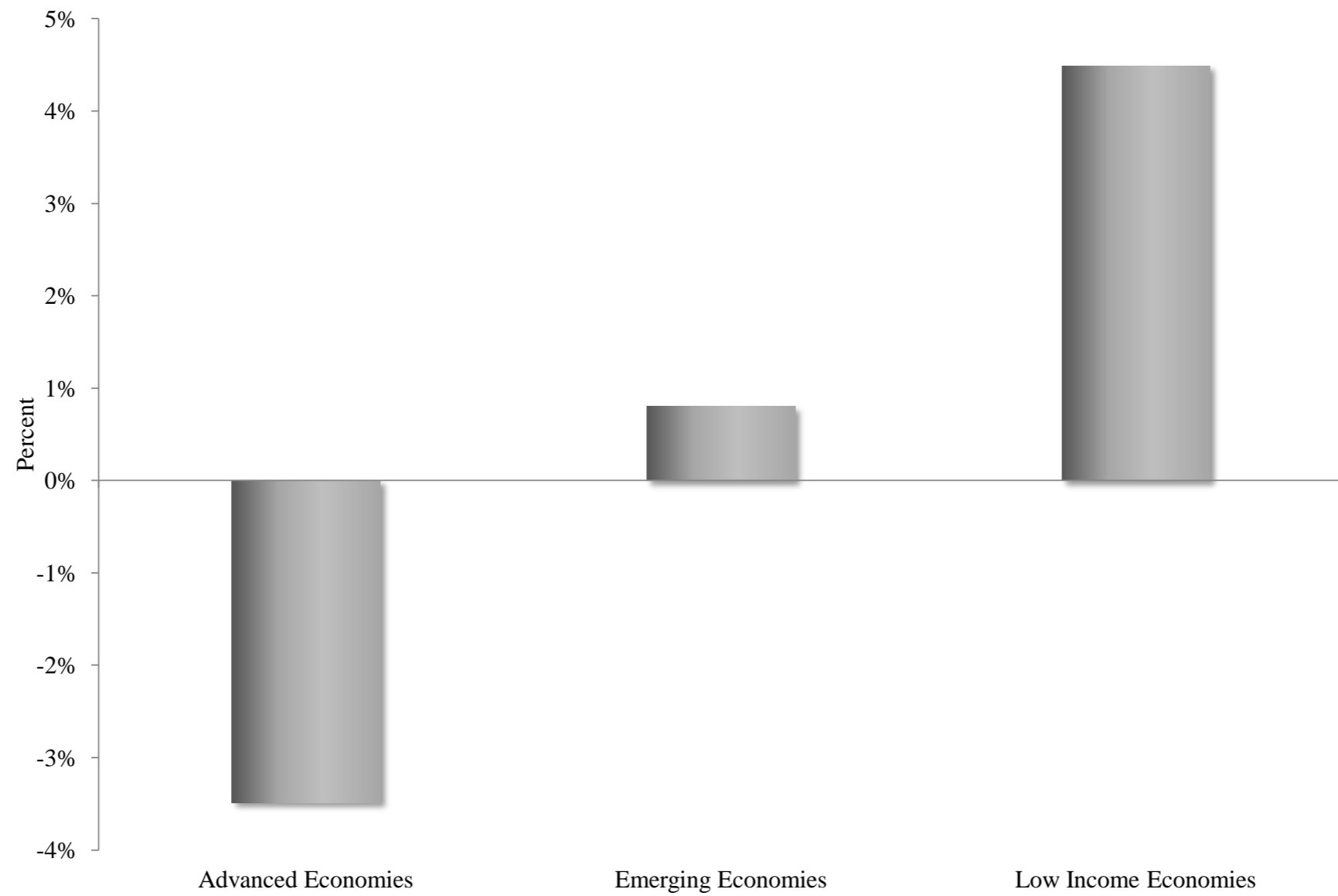
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Figure 1
Real GDP Growth in 2009 and Growth Forecasts across Income Levels

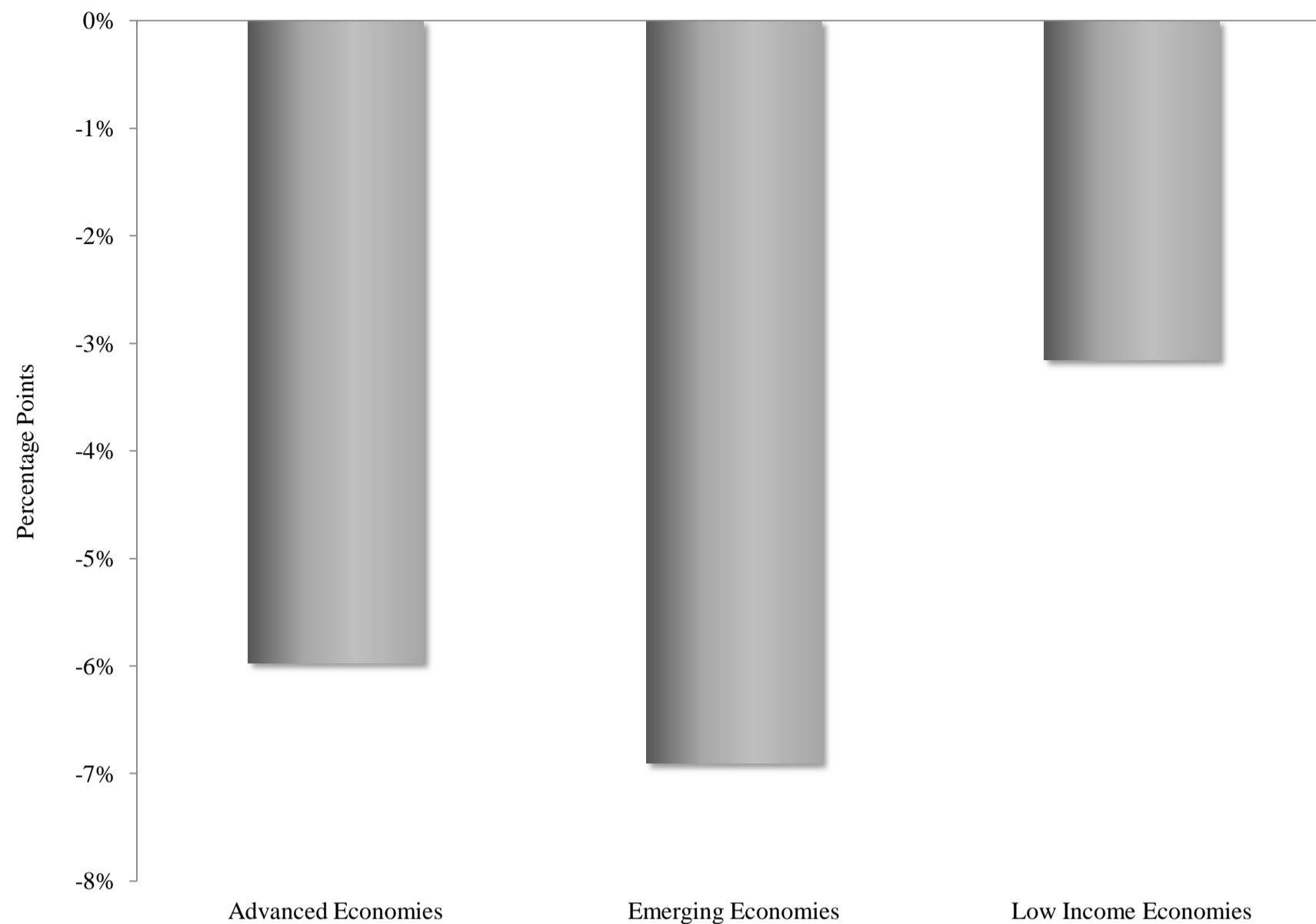
Panel A: 2009 Real GDP Growth Rates



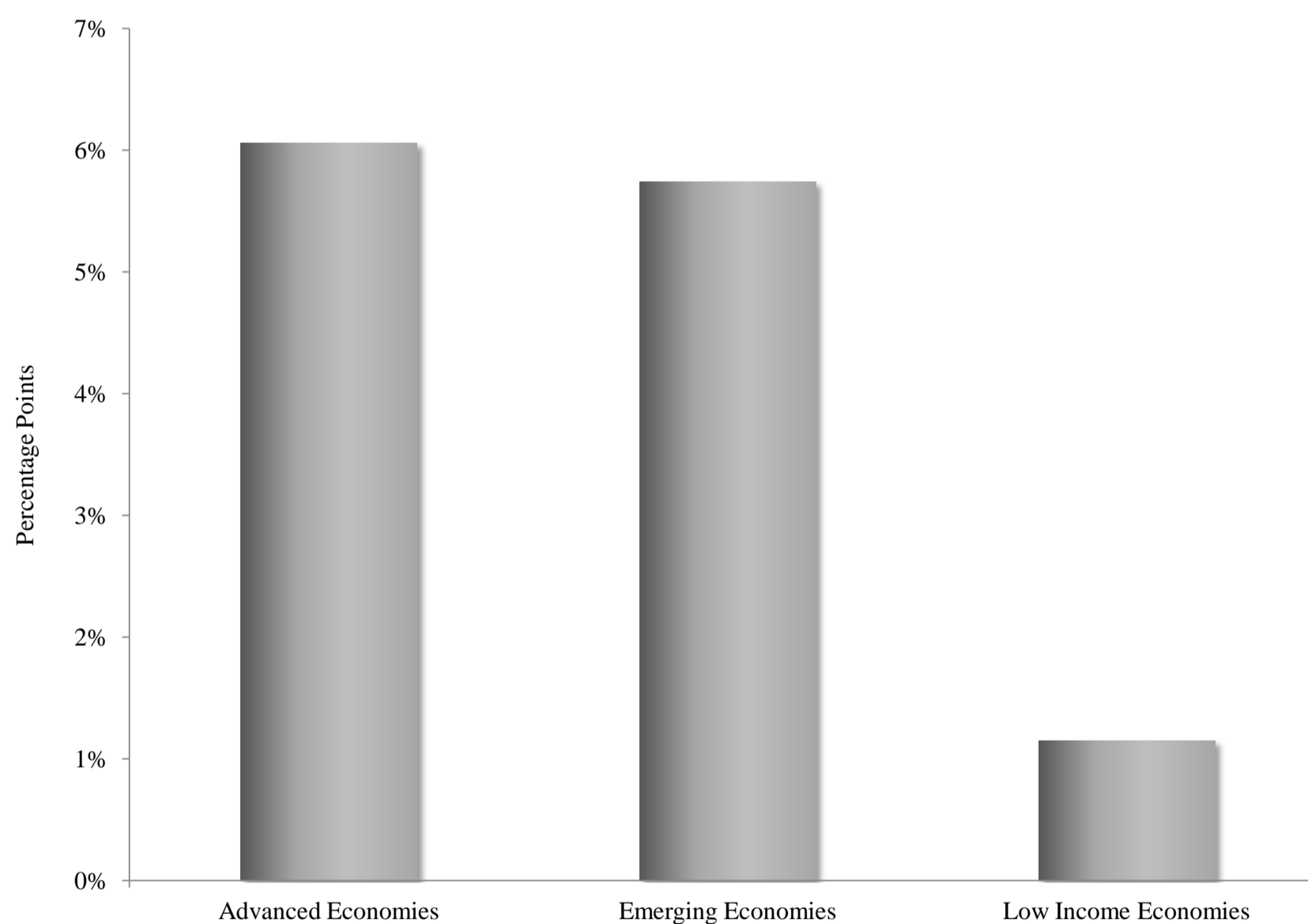
Real GDP from the IMF's World Economic Outlook (October 2010). Projections for 2010-2011 come from Consensus Forecasts (January 2011) and the IMF's World Economic Outlook (October 2010) for countries not in the Consensus Forecasts sample. Income level averages are weighted by 2007 nominal GDP in U.S. dollars from the World Economic Outlook (October 2010). Advanced economies are economies classified as "High Income" under the World Bank July 2010 classification (both OECD and non-OECD). Economies are classified as emerging if they have access to IBRD financing, and as low income if they only have access to IDA financing.

Figure 2
Real GDP Growth Collapse and Recovery across Income Levels

Panel A: Real GDP Growth Collapse (Growth in 2009 Minus Growth in 2007)



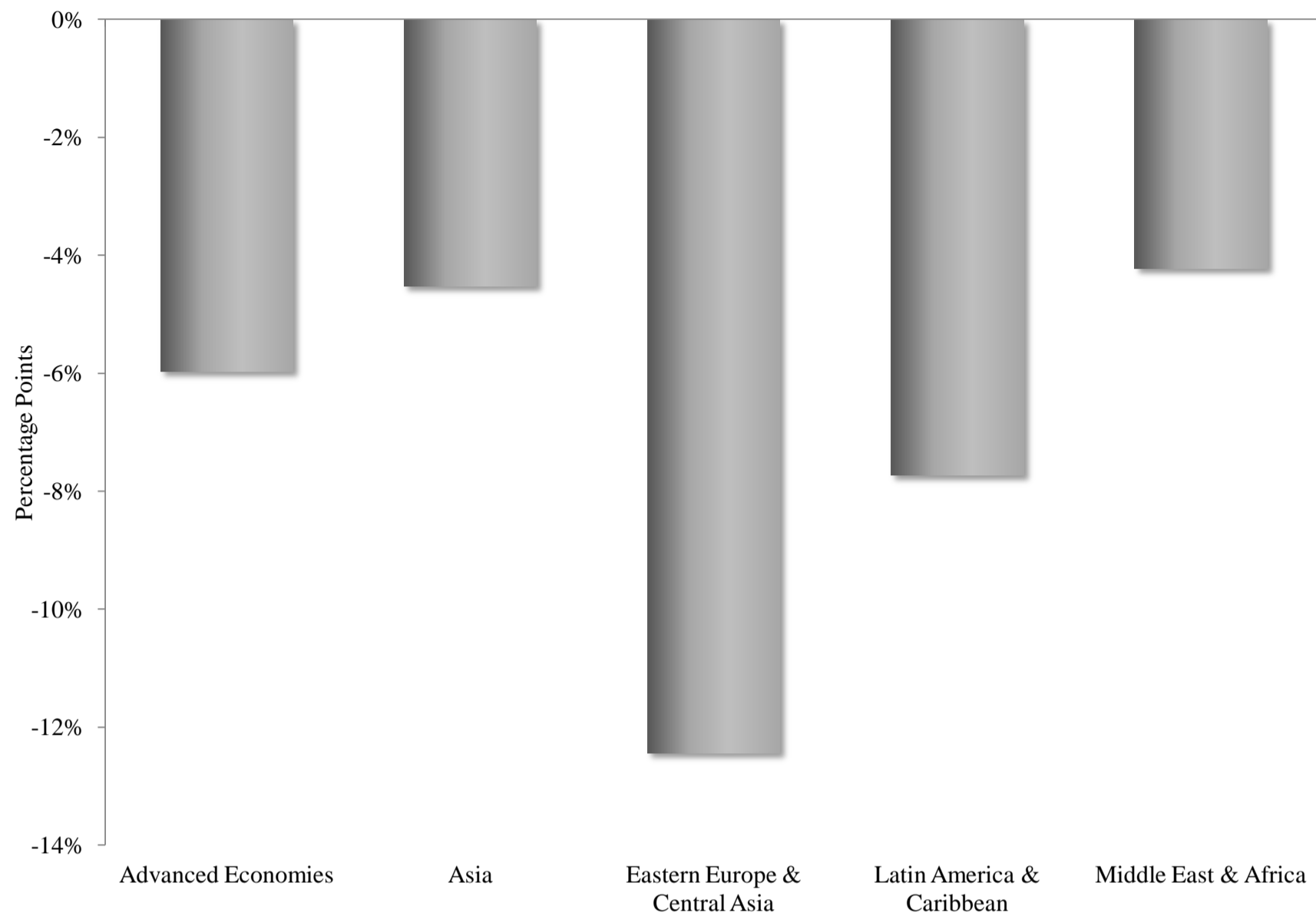
Panel B: Real GDP Growth Recovery (Growth in 2010 Minus Growth in 2009)



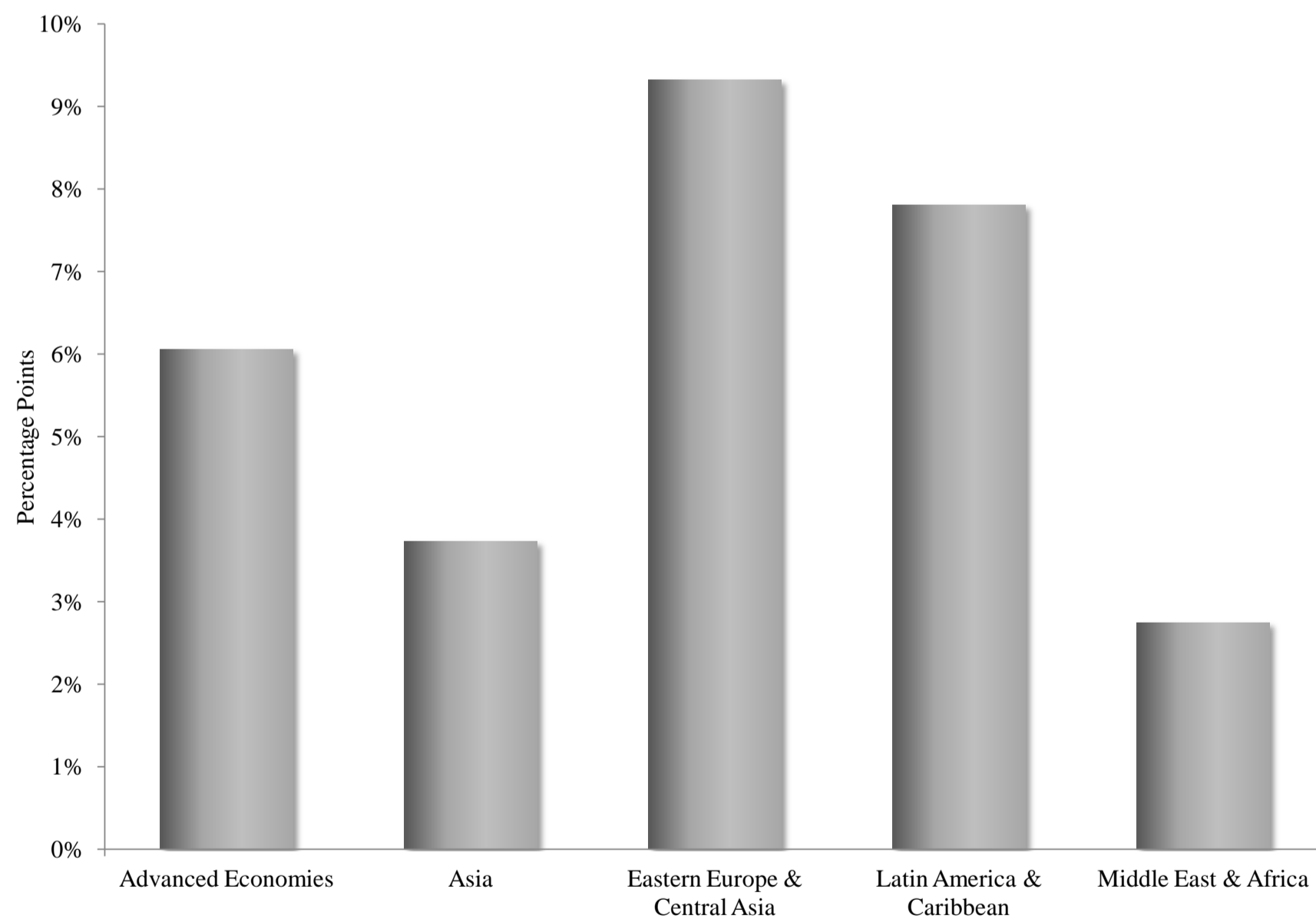
This figure shows real GDP growth collapse and recovery around the 2008-2009 crisis across income levels. Panel A shows the collapse in real GDP growth, defined as the difference between the growth rate in 2009 vis-à-vis the growth rate in 2007. Panel B shows the recovery in real GDP growth, defined as the difference between the expected growth rate in 2010 vis-à-vis the growth rate in 2009. 2007 and 2009 data come from the IMF's World Economic Outlook (October 2010). Projections for 2010 come from Consensus Forecasts (January 2011) and the IMF's World Economic Outlook (October 2010) for countries not in the Consensus Forecasts sample. The numbers are shown as percentage points of GDP. Income level averages are weighted by 2007 nominal GDP in U.S. dollars from the World Economic Outlook (October 2010). Advanced economies are economies classified as "High Income" under the World Bank July 2010 classification (both OECD and non-OECD). Economies are classified as emerging if they have access to IBRD financing, and as low income if they only have access to IDA financing.

Figure 3
Real GDP Growth Collapse and Recovery across Regions

Panel A: Real GDP Growth Collapse (Growth in 2009 Minus Growth in 2007)

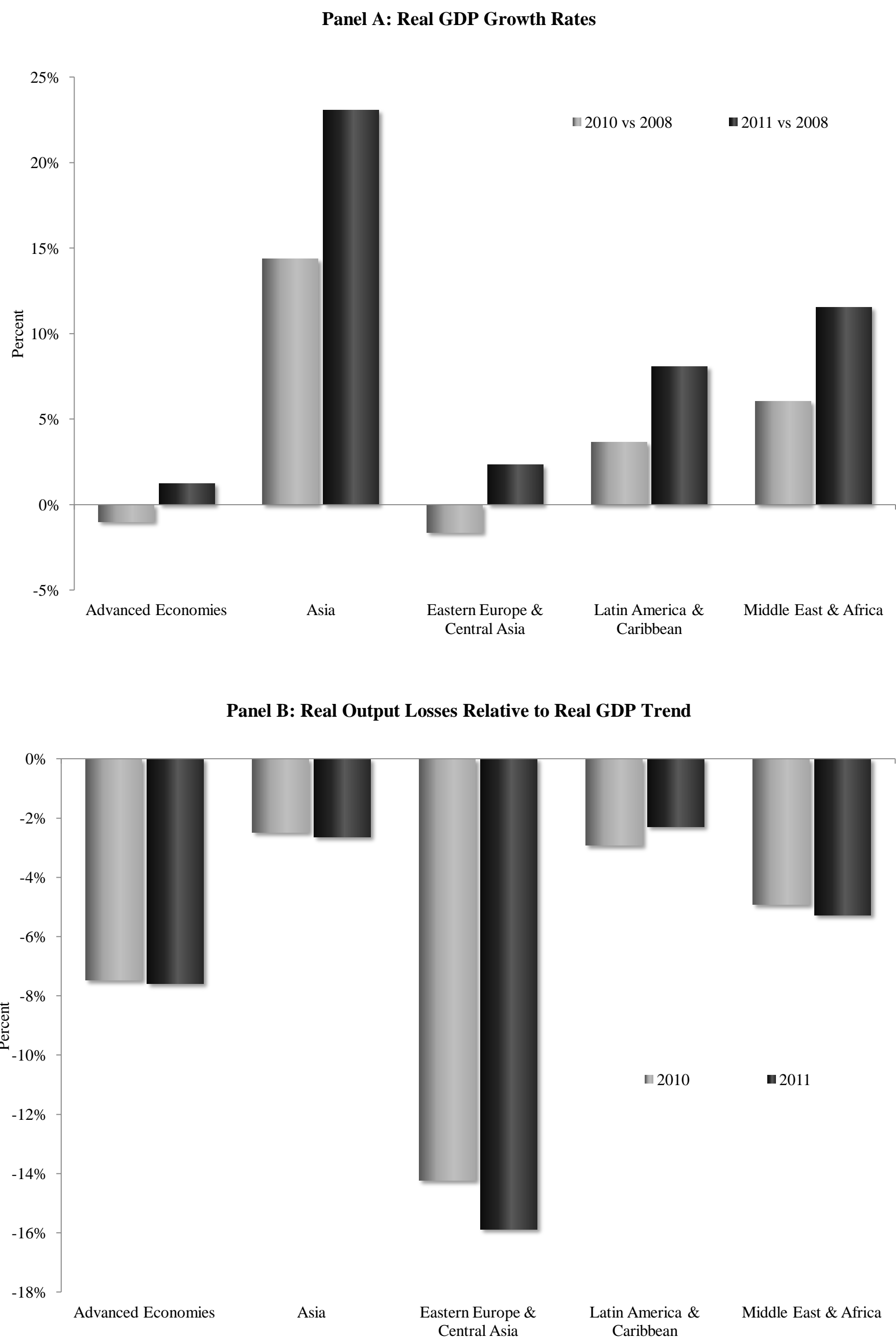


Panel B: Real GDP Growth Recovery (Growth in 2010 Minus Growth in 2009)



Panel A shows the collapse in real GDP growth, defined as the difference between the growth rate in 2009 and the growth rate in 2007. Panel B shows the recovery in real GDP growth, defined as the difference between the expected growth rate in 2010 vis-à-vis the growth rate in 2009. 2007 and 2009 data come from the IMF's World Economic Outlook (October 2010). Projections for 2010 come from Consensus Forecasts (January 2011) and the IMF's World Economic Outlook (October 2010) for countries not in the Consensus Forecasts sample. The numbers are shown as percentage points of GDP. Regional averages are weighted by 2007 nominal GDP in U.S. dollars from the World Economic Outlook (October 2010). Advanced economies are economies classified as "High Income" under the World Bank July 2010 classification (both OECD and non-OECD). Countries not classified as advanced are assigned to regions according to the World Bank's July 2010 classification. "Middle East & Africa" includes "Middle East & North Africa" and "Sub-Saharan Africa." "Asia" includes "East Asia & Pacific" and "South Asia."

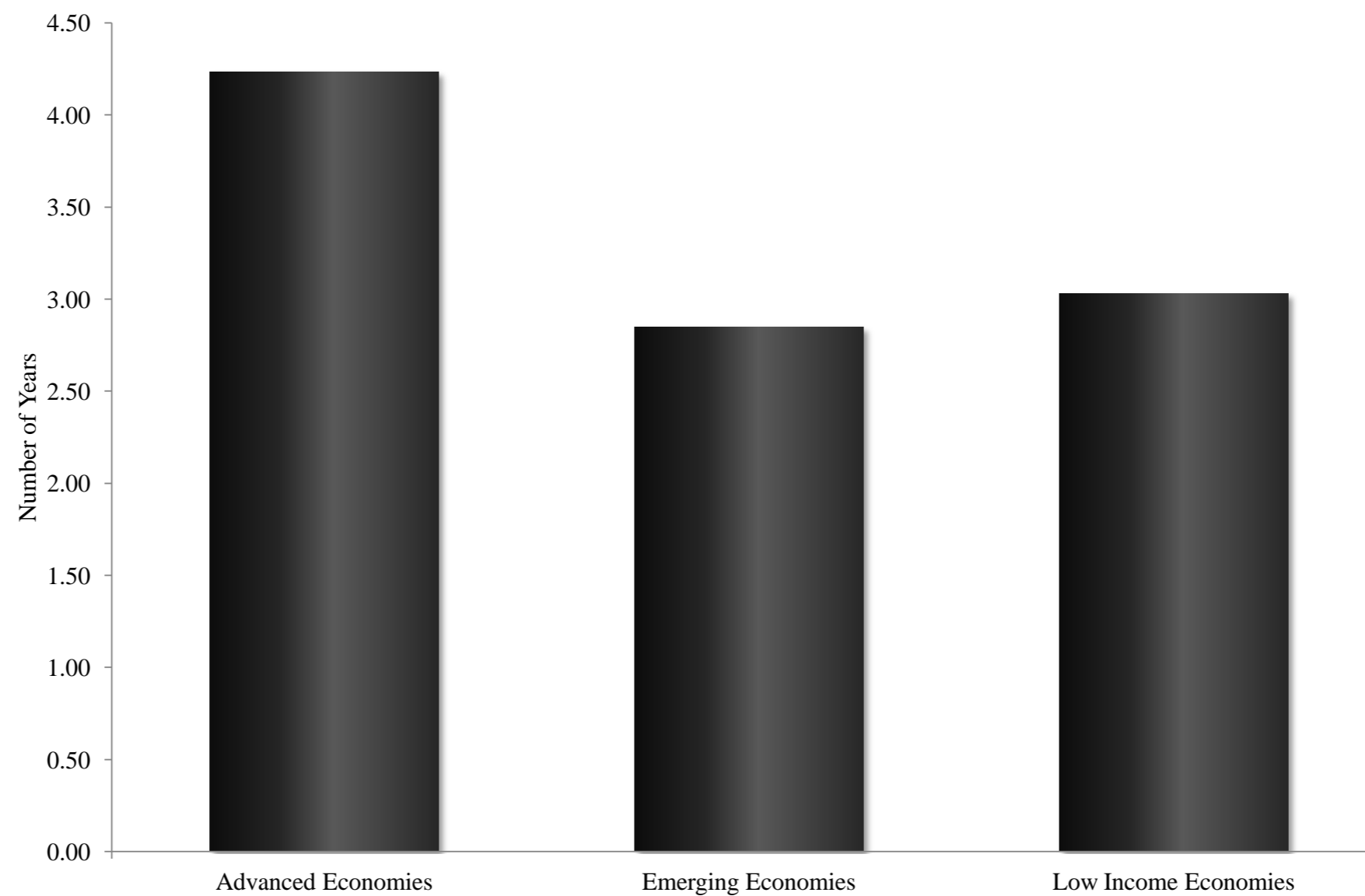
Figure 4
Real GDP Growth Rates and Output Losses Relative to Pre-Crisis Trend



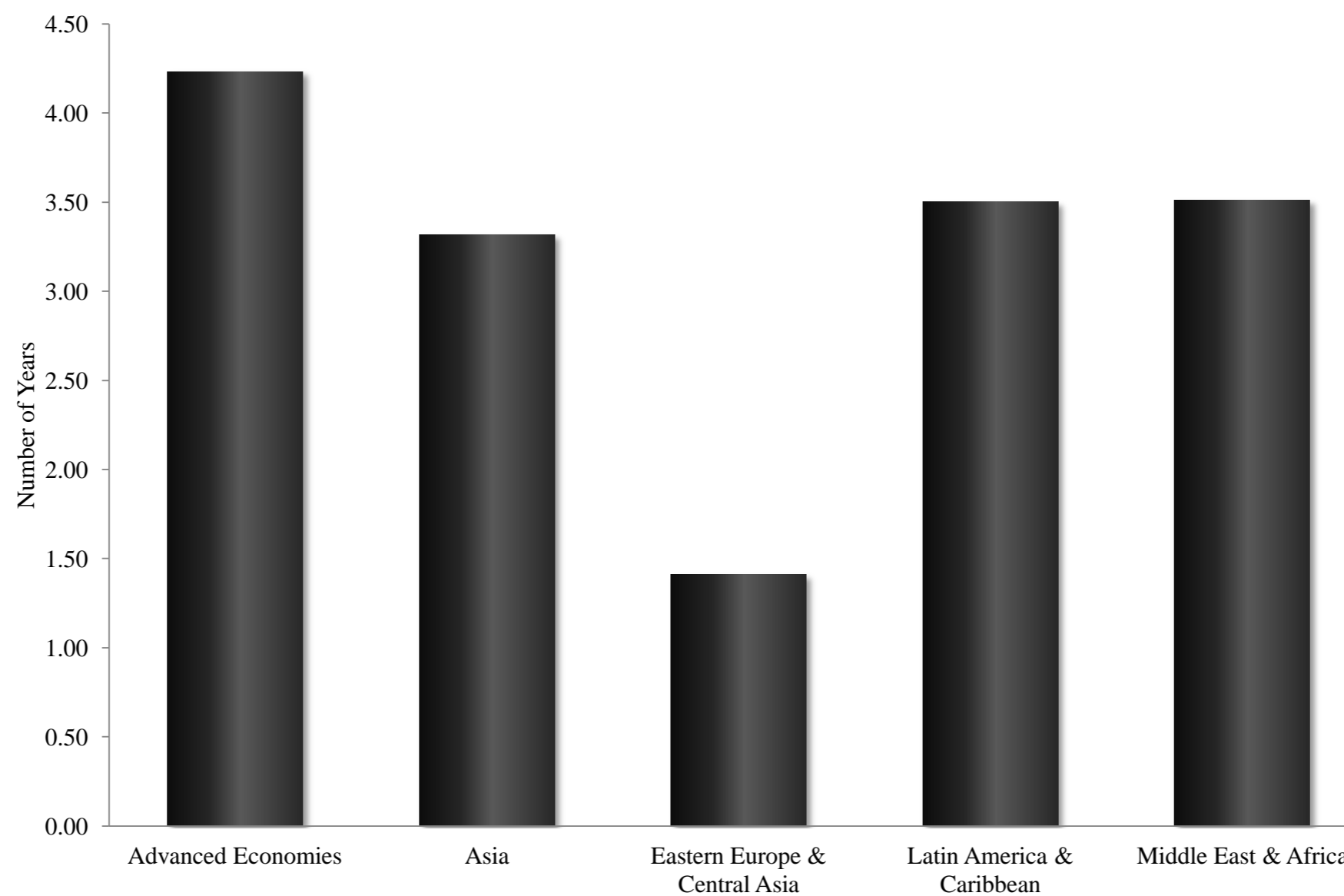
This figure shows real GDP in 2010 and 2011 in comparison with previous trends. Panel A shows the projected real GDP in 2010 and 2011 as a percentage of the 2008 real GDP. Panel B shows the projected real output losses relative to real GDP trend for 2010 and 2011, defined as the difference between projected real GDP for 2010 (2011) and counterfactual real GDP for 2010 (2011), expressed as a percentage of counterfactual real GDP for 2010 (2011). Projected real GDP is calculated based on 2009 real GDP level and 2010-2011 growth projections (and actual figures for some countries for 2010). Counterfactual real GDP is constructed by extrapolating pre-crisis average growth rates through the 2008-2011 period (i.e. as if there had been no crisis event). Data for counterfactual real GDP is thus calculated based on 2007 real GDP level and the 2000-2007 average growth rate extrapolated through 2008-2011. The 2000-2009 data come from the IMF's World Economic Outlook (October 2010). Projections for 2010-2011 come from Consensus Forecasts (January 2011) and the IMF's World Economic Outlook (October 2010) for the countries not in Consensus Forecasts sample. Regional averages are weighted by 2007 nominal GDP in U.S. dollars from the World Economic Outlook (October 2010). Advanced economies are economies classified as "High Income" under the World Bank July 2010 classification (both OECD and non-OECD). Countries not classified as advanced are assigned to regions according to the World Bank's July 2010 classification. "Middle East & Africa" includes "Middle East & North Africa" and "Sub-Saharan Africa." "Asia" includes "East Asia & Pacific" and "South Asia."

Figure 5
Fiscal Space

Panel A: 2007 Fiscal Space Measure across Income Levels



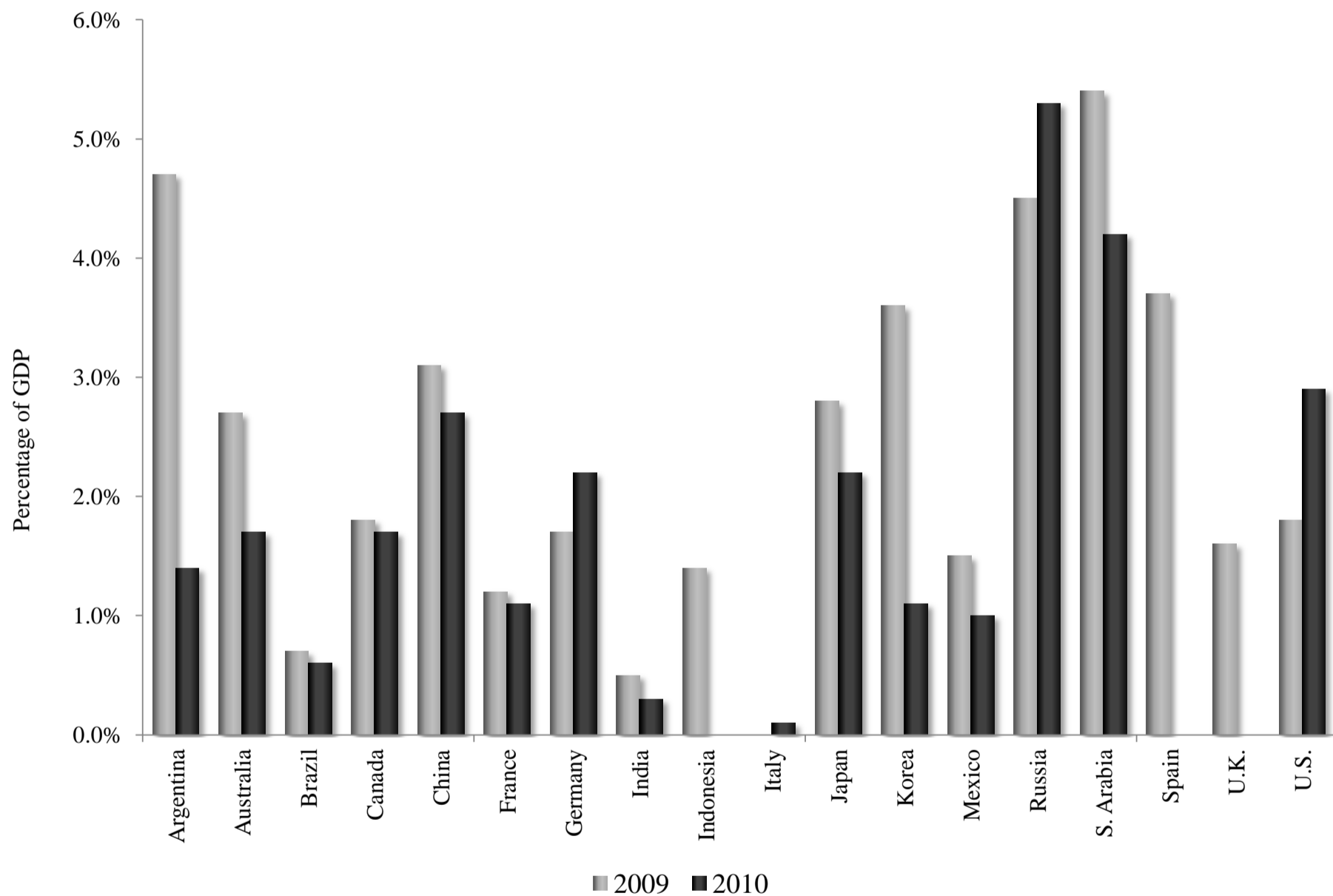
Panel B: 2007 Fiscal Space Measure across Regions



This figure shows a fiscal space measure across income levels and regions. The de facto fiscal space measures the number of tax years needed for a country to repay its outstanding public debt. This is defined as the ratio of the outstanding public debt as of 2007 to the pre-crisis tax revenue (averaged across 2000-2007). This measure is based on Aizenman and Jinjarak (2010). The data come from the World Bank's WDI. Regional and income level averages are weighted by 2007 nominal GDP in U.S. dollars from the World Economic Outlook (October 2010). Advanced economies are economies classified as "High Income" under the World Bank July 2010 classification (both OECD and non-OECD). Economies are classified as emerging if they have access to IBRD financing, and as low income if they only have access to IDA financing. Countries not classified as advanced are assigned to regions according to the World Bank's July 2010 classification. "Middle East & Africa" includes "Middle East & North Africa" and "Sub-Saharan Africa." "Asia" includes "East Asia & Pacific" and "South Asia."

Figure 6
Fiscal Policy

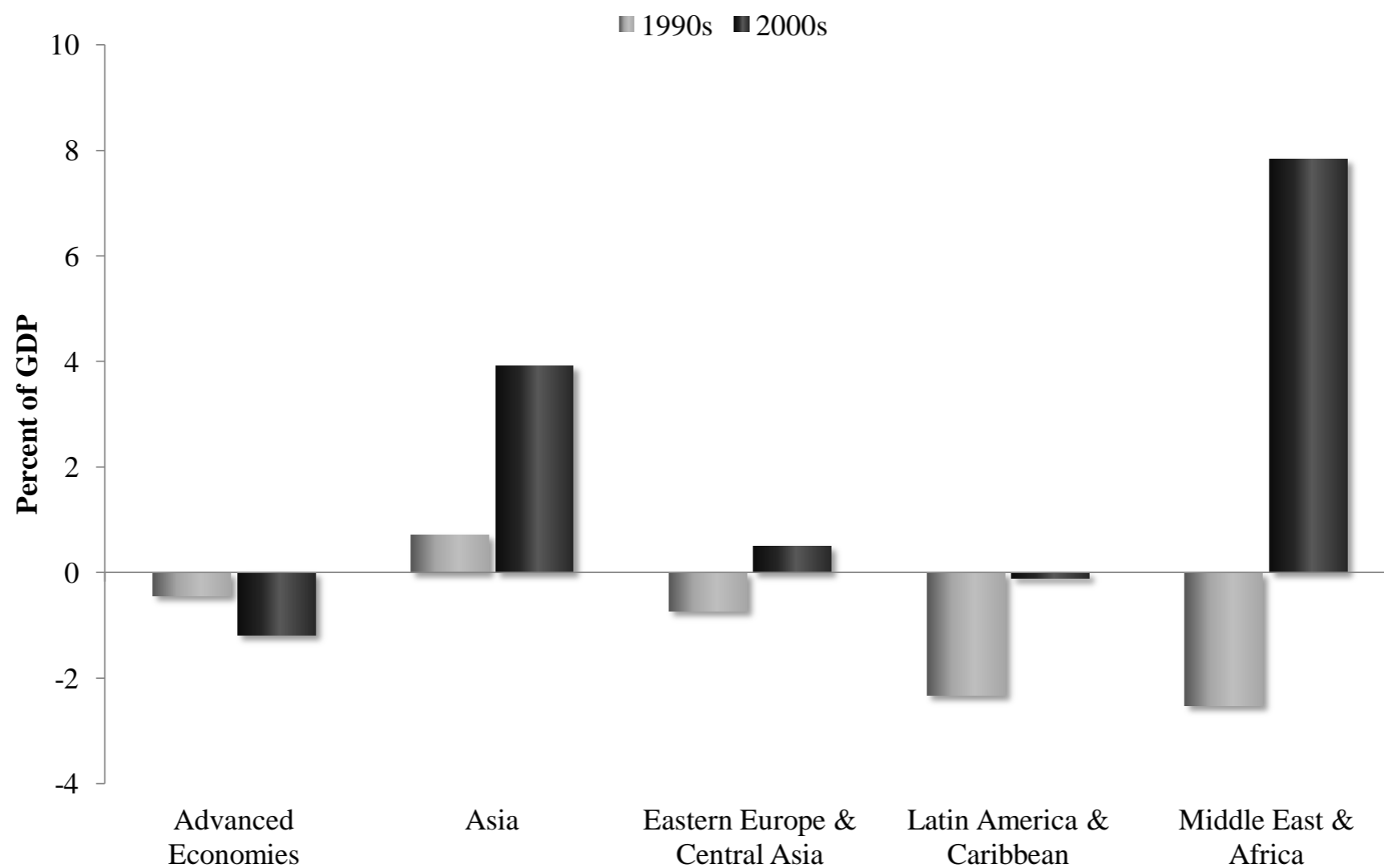
Estimated Costs of Fiscal Discretionary Measures in 2009 and 2010



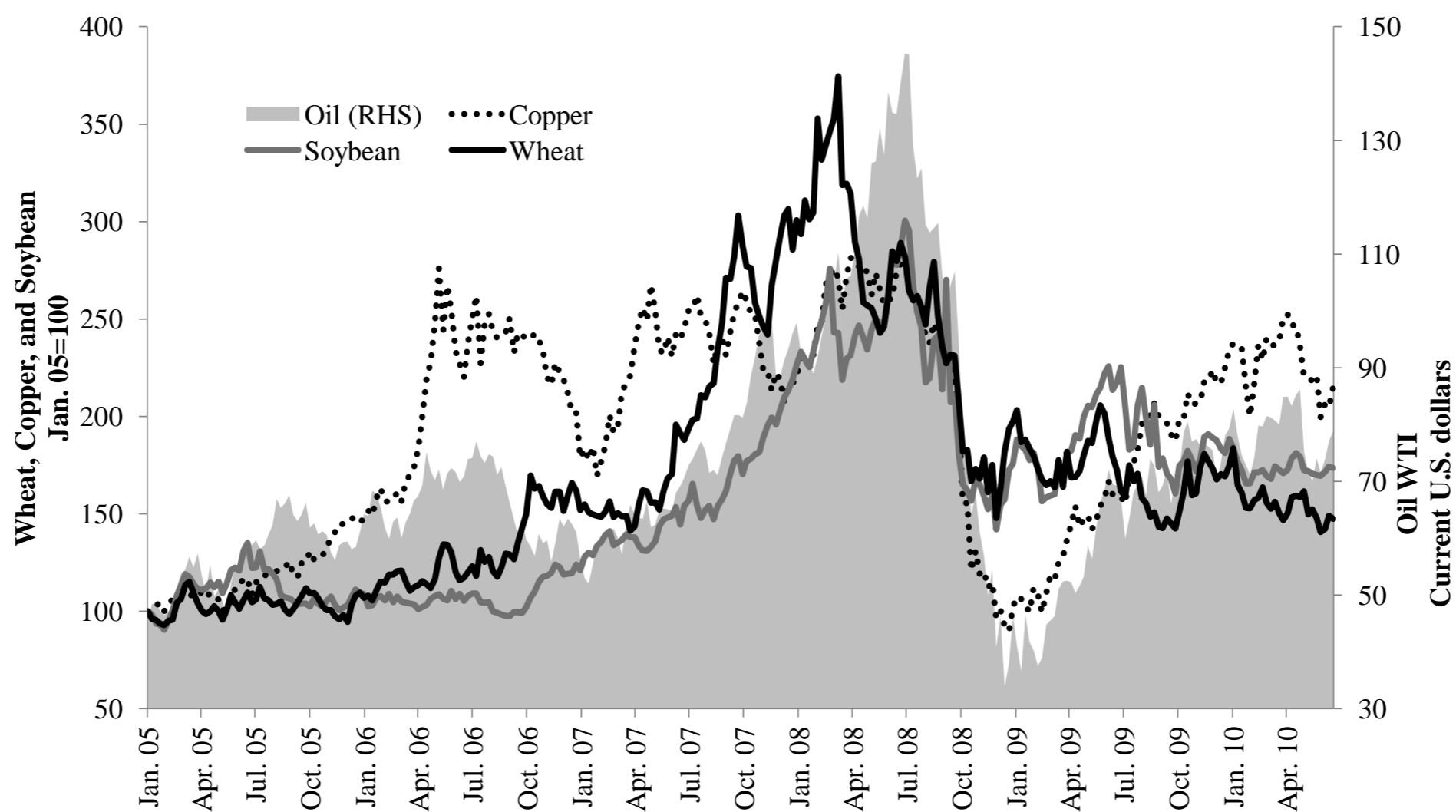
This figure shows estimated costs and announced fiscal packages during the 2008-2009 crisis. The data come from IMF's "The State of Public Finances: Outlook and Medium Term Policies After the 2008-2009 crisis."

Figure 7
Current Account Balance and Commodity Prices

Panel A: Current Account Balance

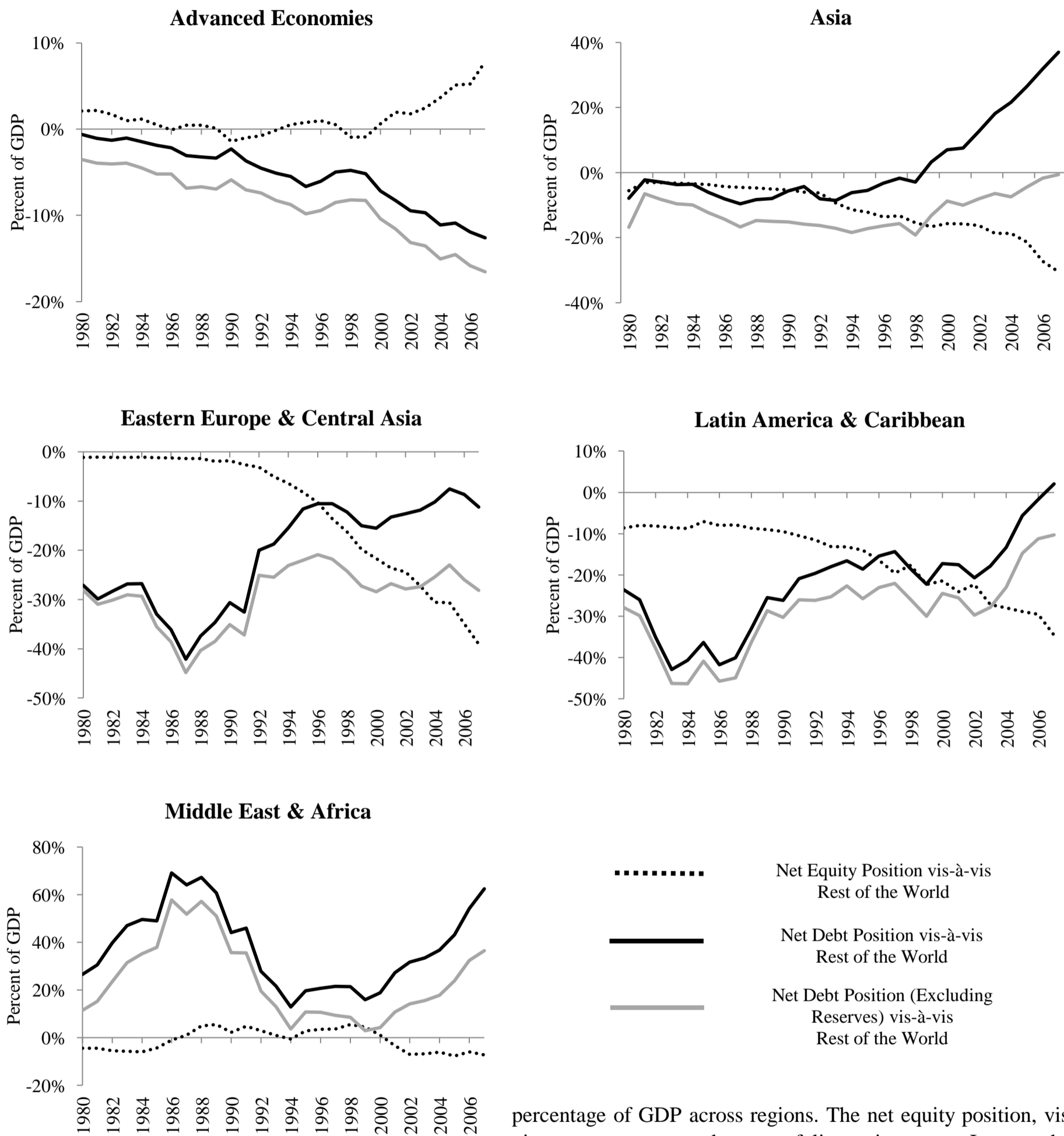


Panel B: Commodity Prices



This figure shows the evolution of current account balances and commodity prices. Panel A shows the average current account balance as a percentage of GDP across regions, during the 1990 and 2000 decades. The data come from the World Bank's World Development Indicators. Panel B shows the evolution of commodity prices from 2005 to 2010. Wheat, copper, and soybean prices (nominal, in U.S. dollars) are indexed to 100 in January 01, 2005. Oil prices are in current U.S. dollars. The data come from Bloomberg. Regional level averages are weighted by 2007 nominal GDP in U.S. dollars from the World Economic Outlook (October 2010). Advanced economies are economies classified as "High Income" under the World Bank July 2010 classification (both OECD and non-OECD). Countries not classified as advanced are assigned to regions according to the World Bank's July 2010 classification. "Middle East & Africa" includes "Middle East & North Africa" and "Sub-Saharan Africa." "Asia" includes "East Asia & Pacific" and "South Asia."

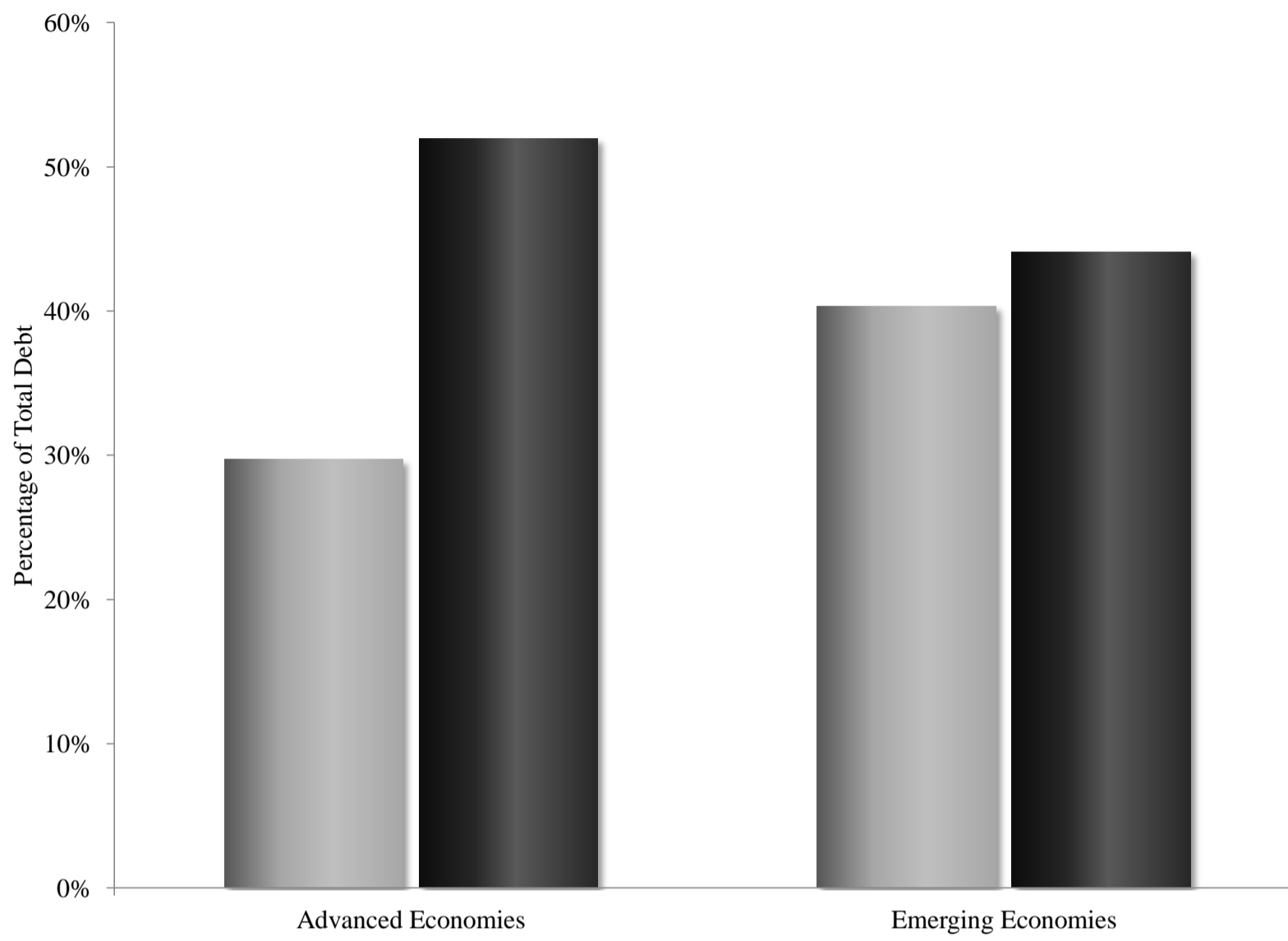
Figure 8
Net Foreign Assets across Regions



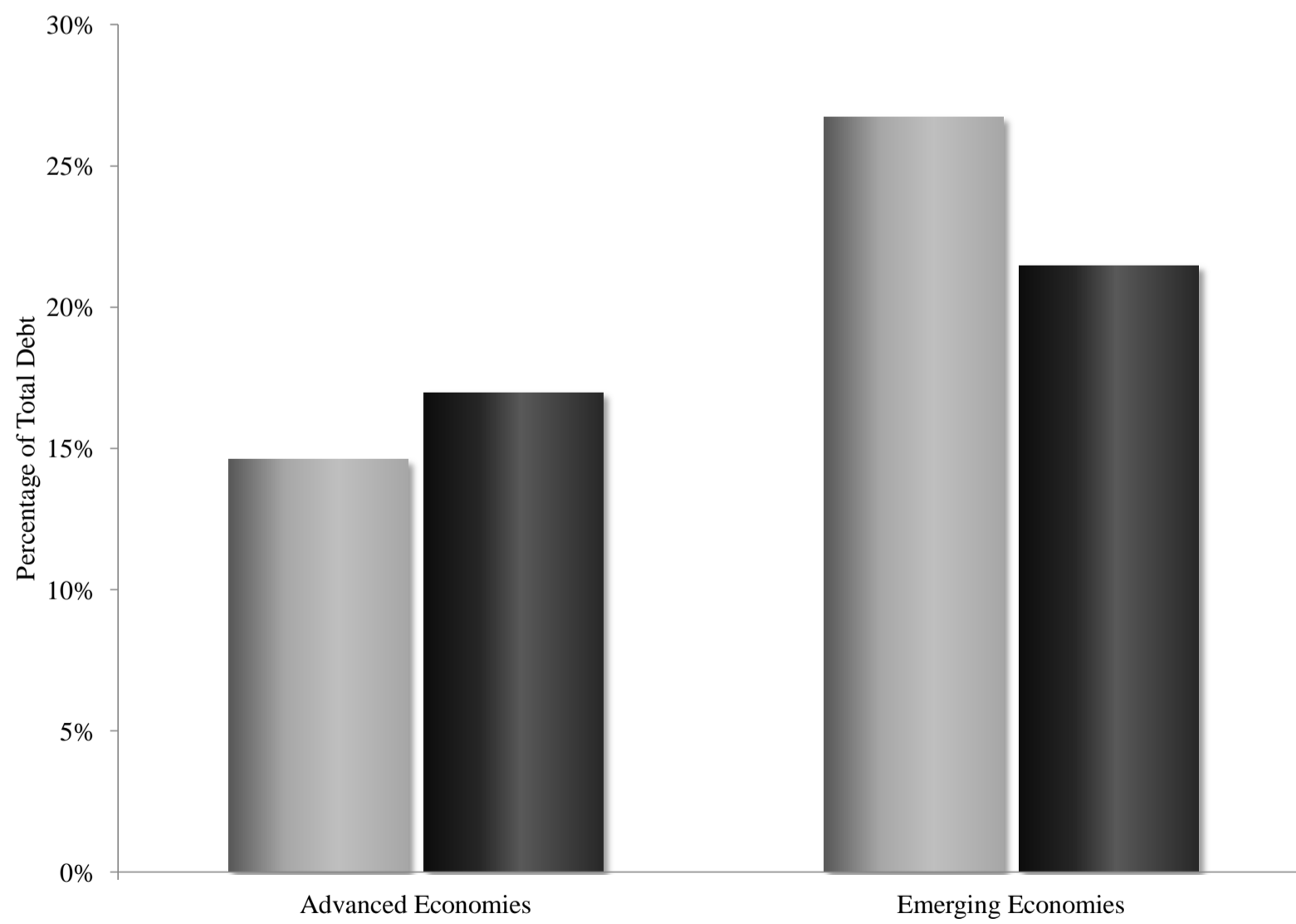
percentage of GDP across regions. The net equity position, vis-à-vis the rest of the world, is the sum of net investment assets and net portfolio equity assets. In turn, the net debt position, vis-à-vis the rest of the world, is the sum of debt assets and reserves minus debt liabilities. The data come from Lane and Milesi-Ferretti (2007). Regional averages are weighted by 2007 nominal GDP in U.S. dollars from the World Economic Outlook (October 2010). Advanced economies are economies classified as "High Income" under the World Bank July 2010 classification (both OECD and non-OECD). Countries not classified as advanced are assigned to regions according to the World Bank's July 2010 classification. "Middle East & Africa" includes "Middle East & North Africa" and "Sub-Saharan Africa." "Asia" includes "East Asia & Pacific" and "South Asia."

Figure 9
Debt Dollarization across Income Levels

Panel A: Private Sector Foreign Currency Debt over Total Debt



Panel B: Public Sector Foreign Currency Debt over Total Debt



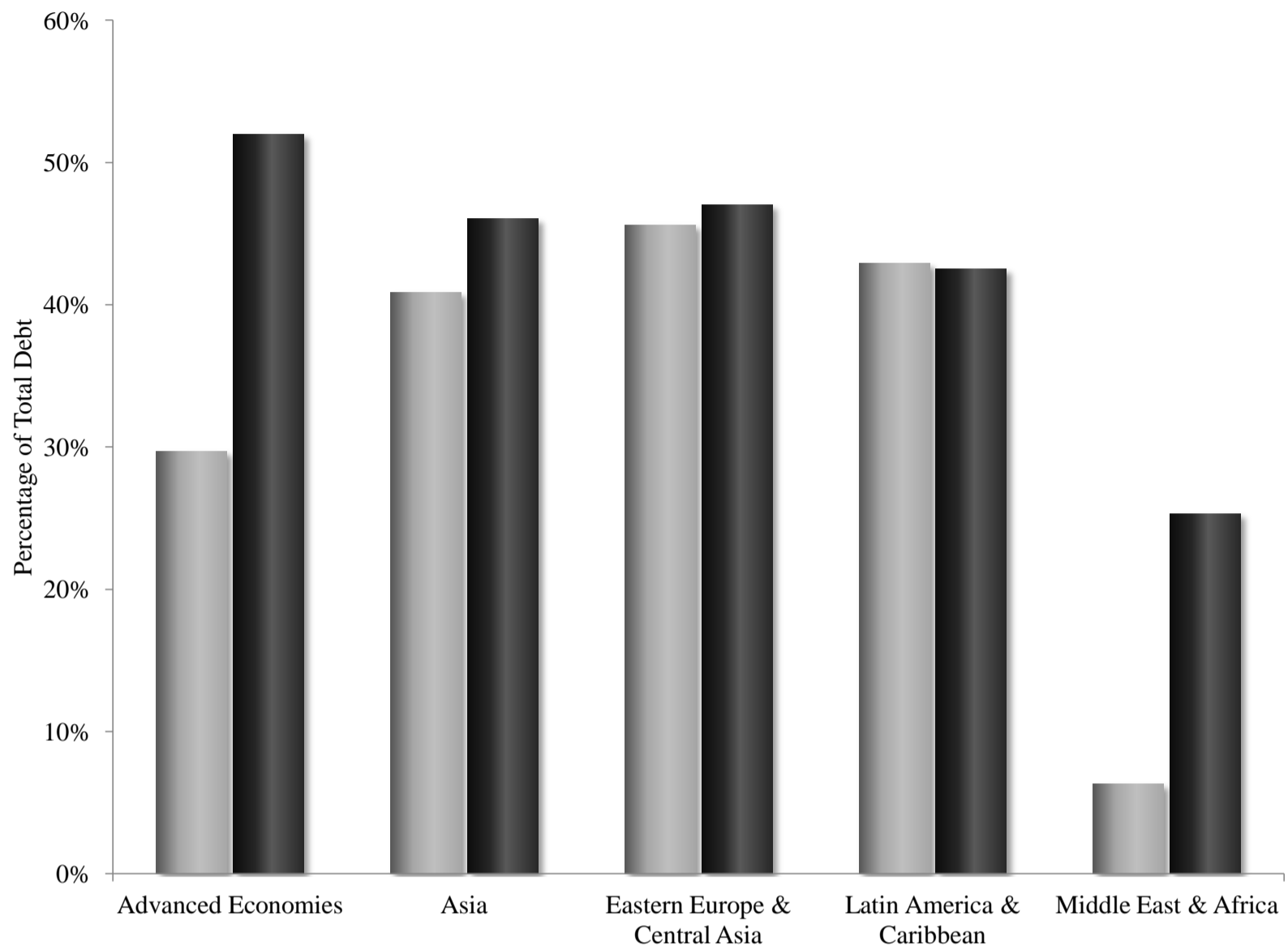
■ 1990s ■ 2000s

Advanced economies are economies classified as 'high income' under the World Bank July 2010 classification (both OECD and non-OECD). Economies are classified as emerging if they have access to IBRD financing.

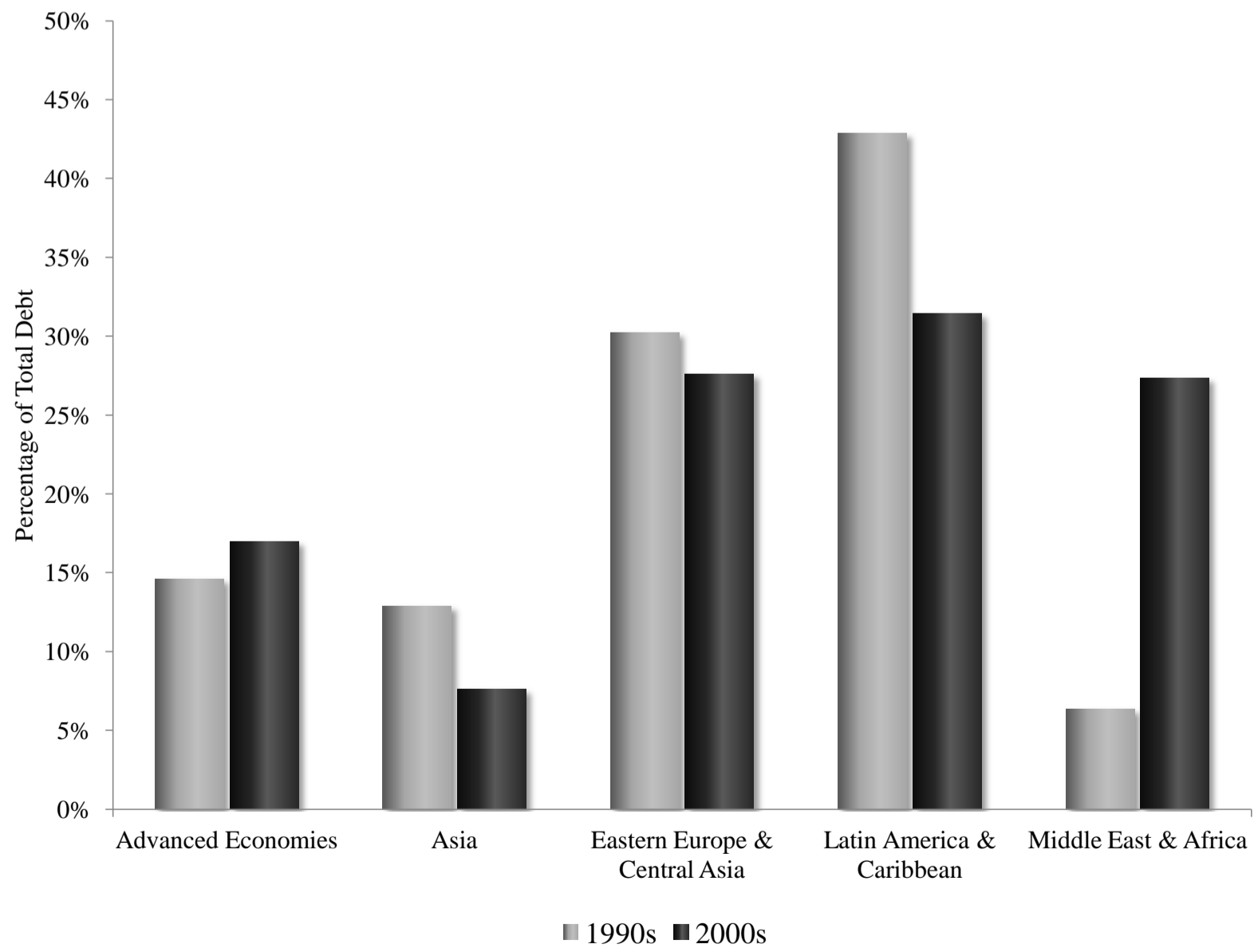
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Figure 10
Debt Dollarization across Regions

Panel A: Private Sector Foreign Currency Debt over Total Debt



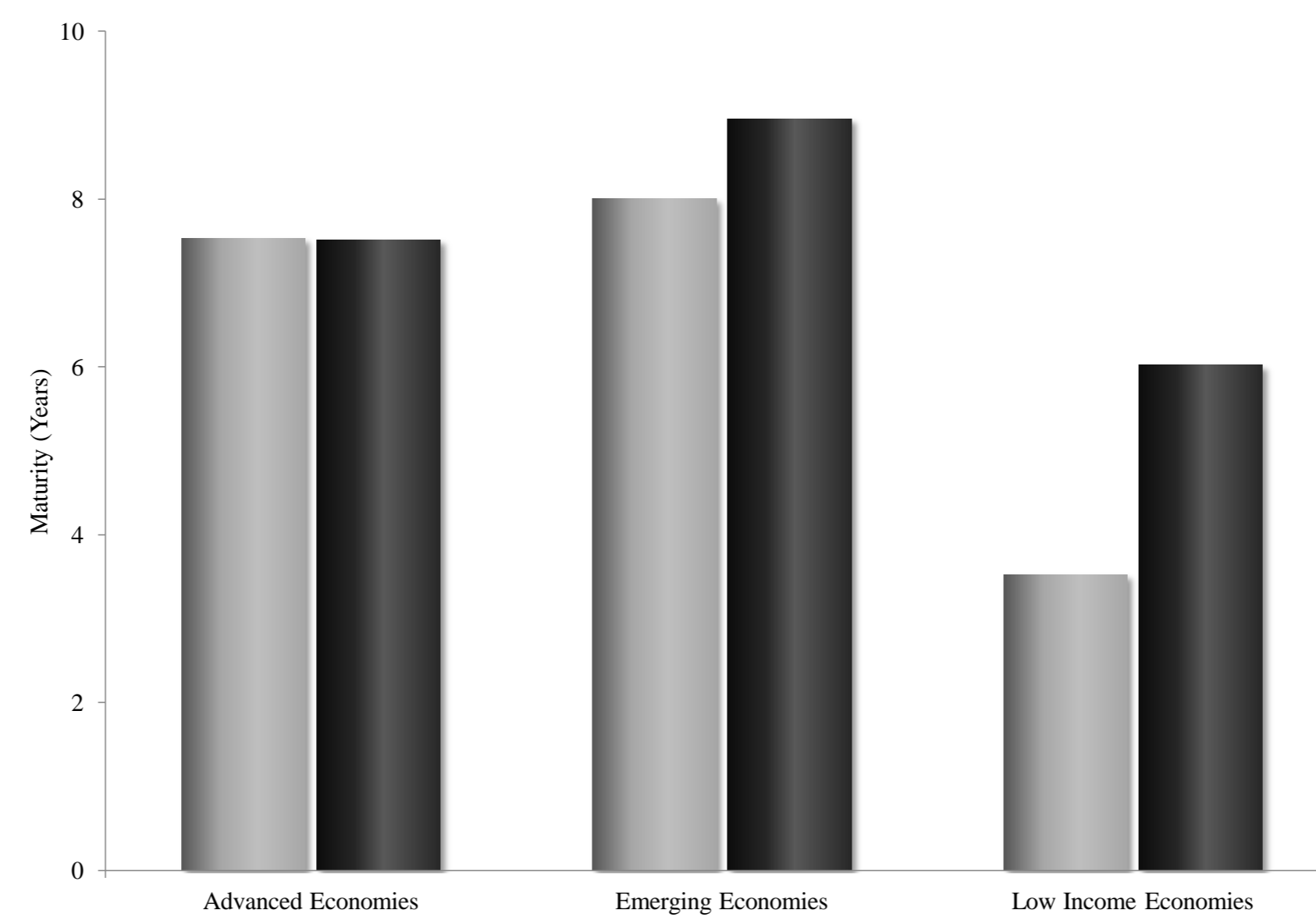
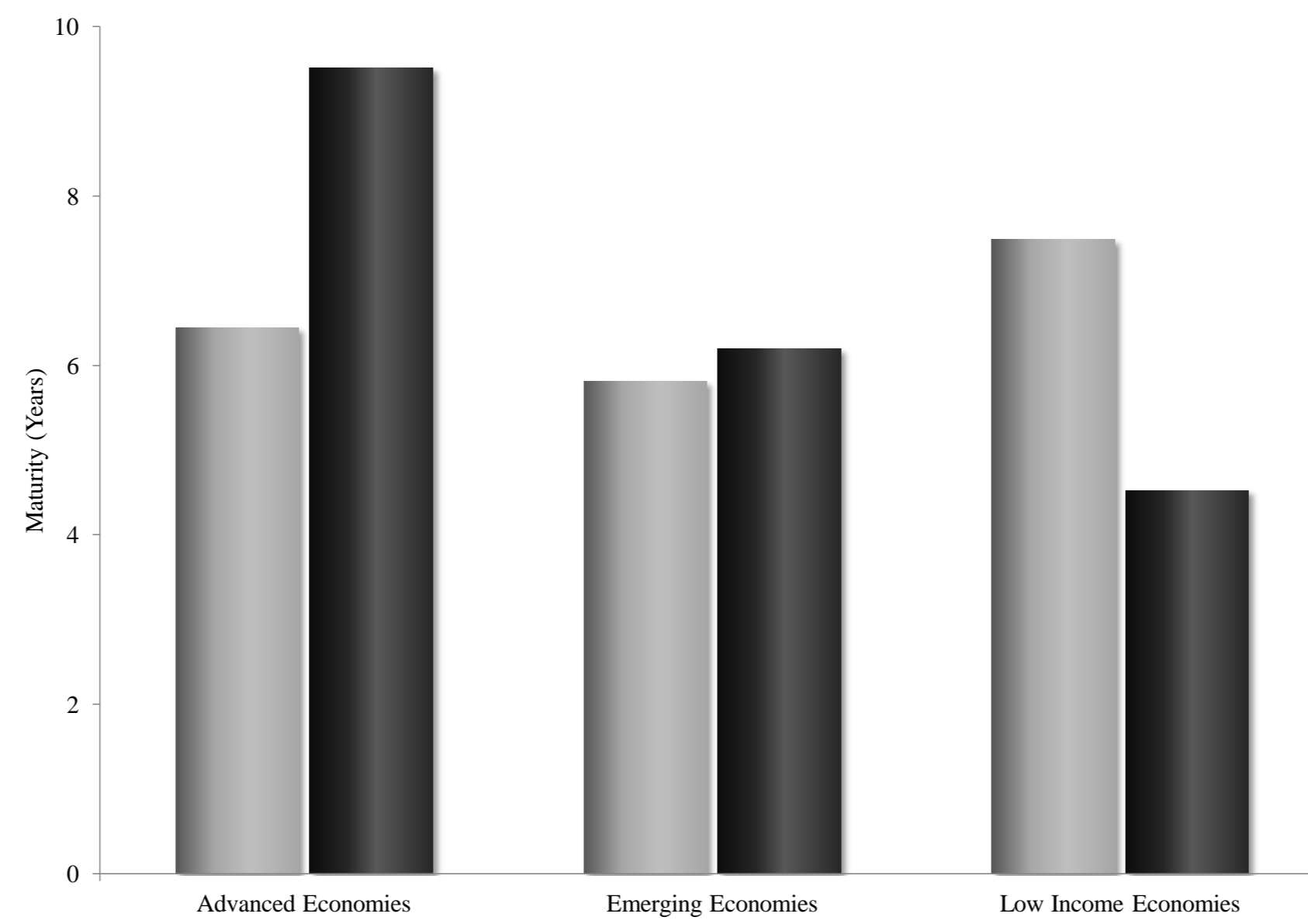
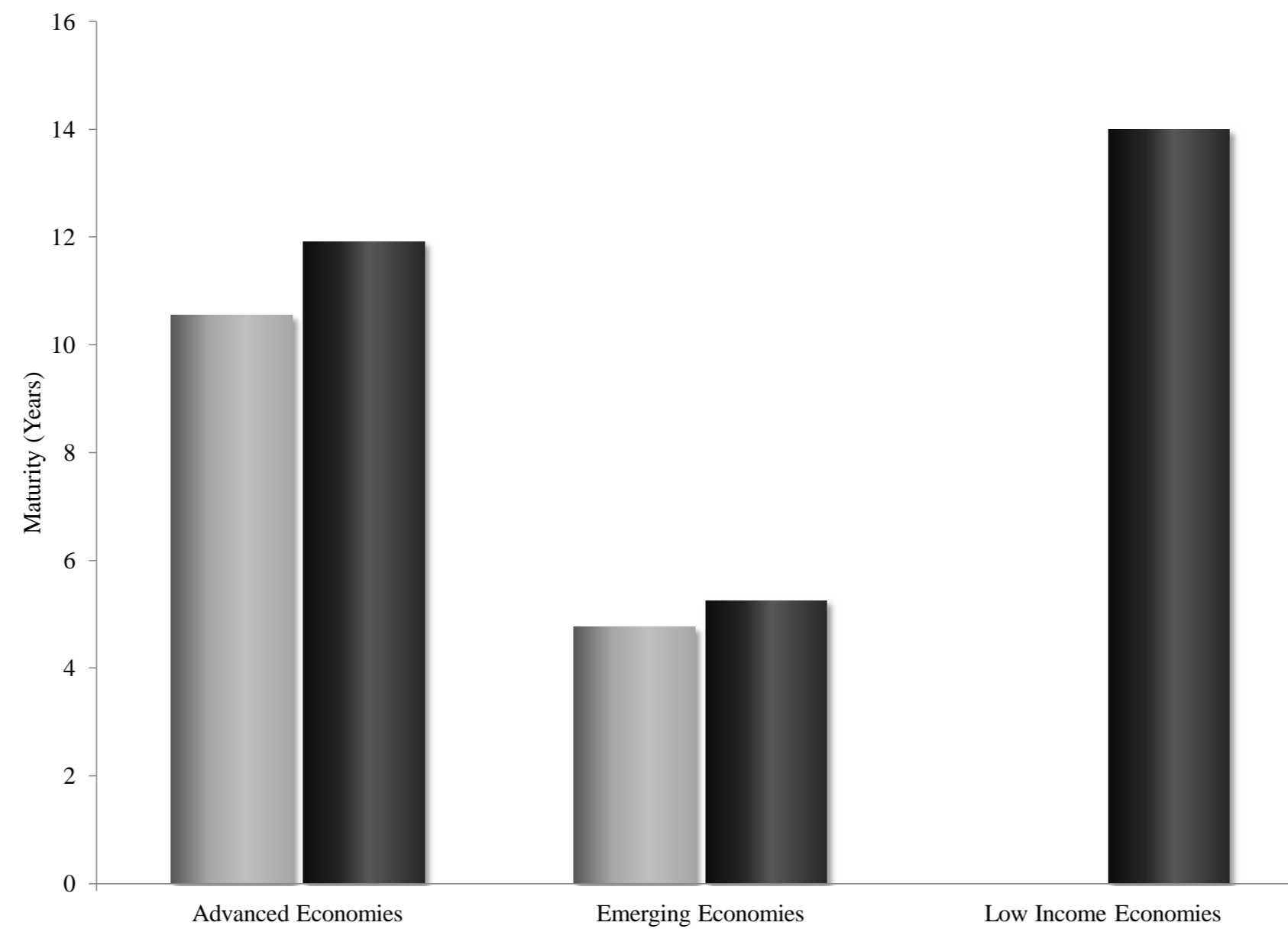
Panel B: Public Sector Foreign Currency Debt over Total Debt



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Figure 11
Private and Public Sector Debt Maturity across Income Levels

Panel A: Private Sector Domestic Debt Maturity



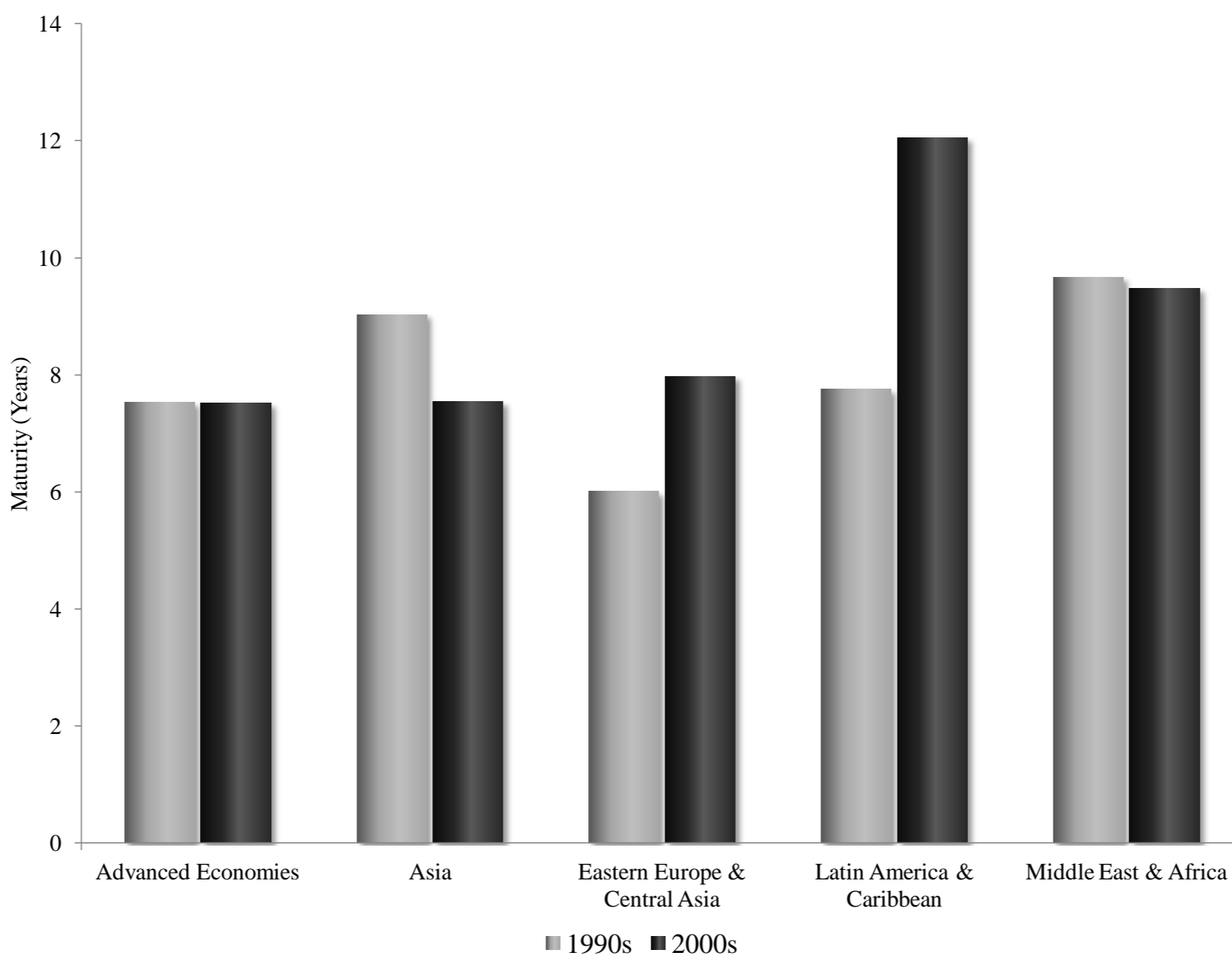
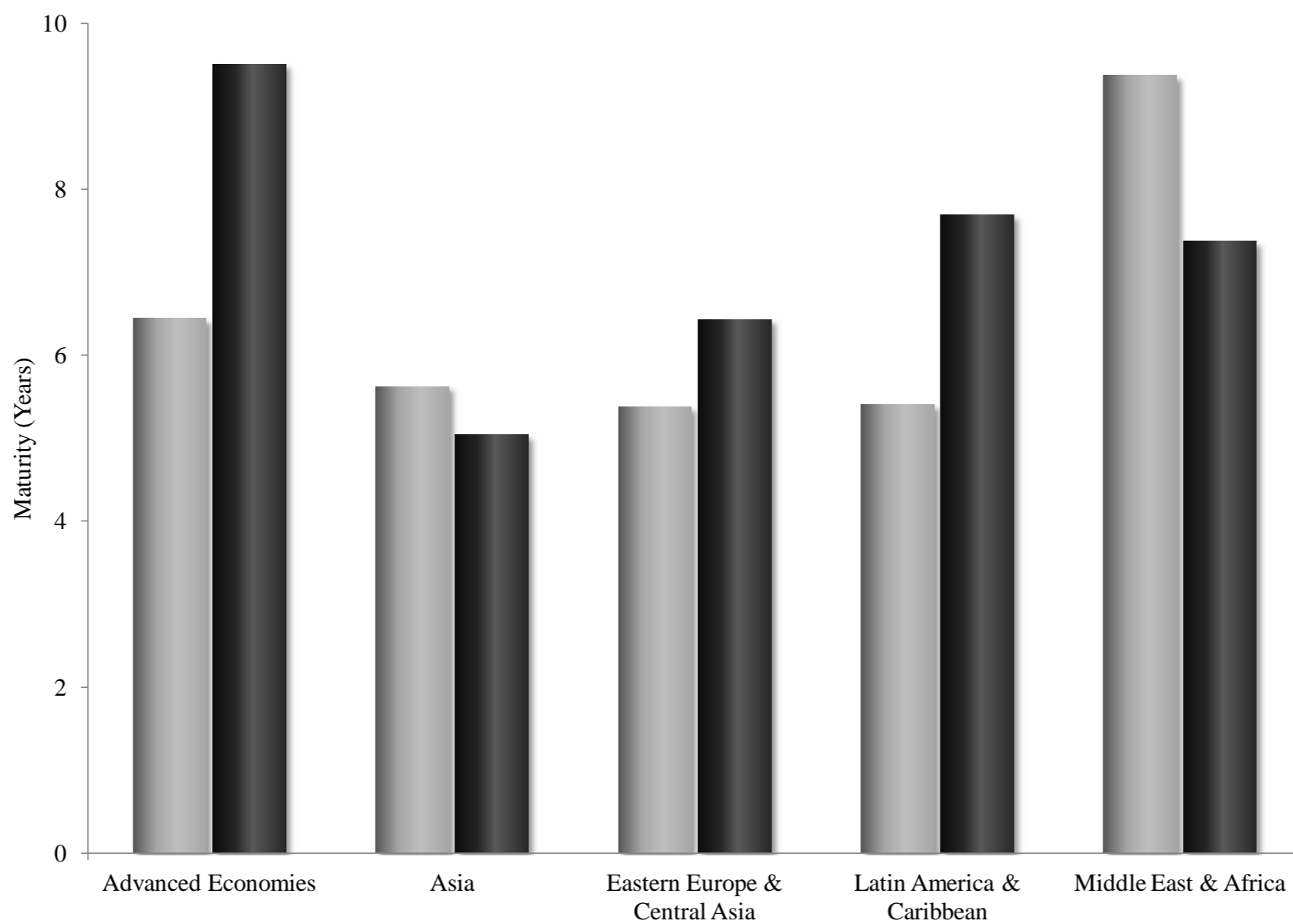
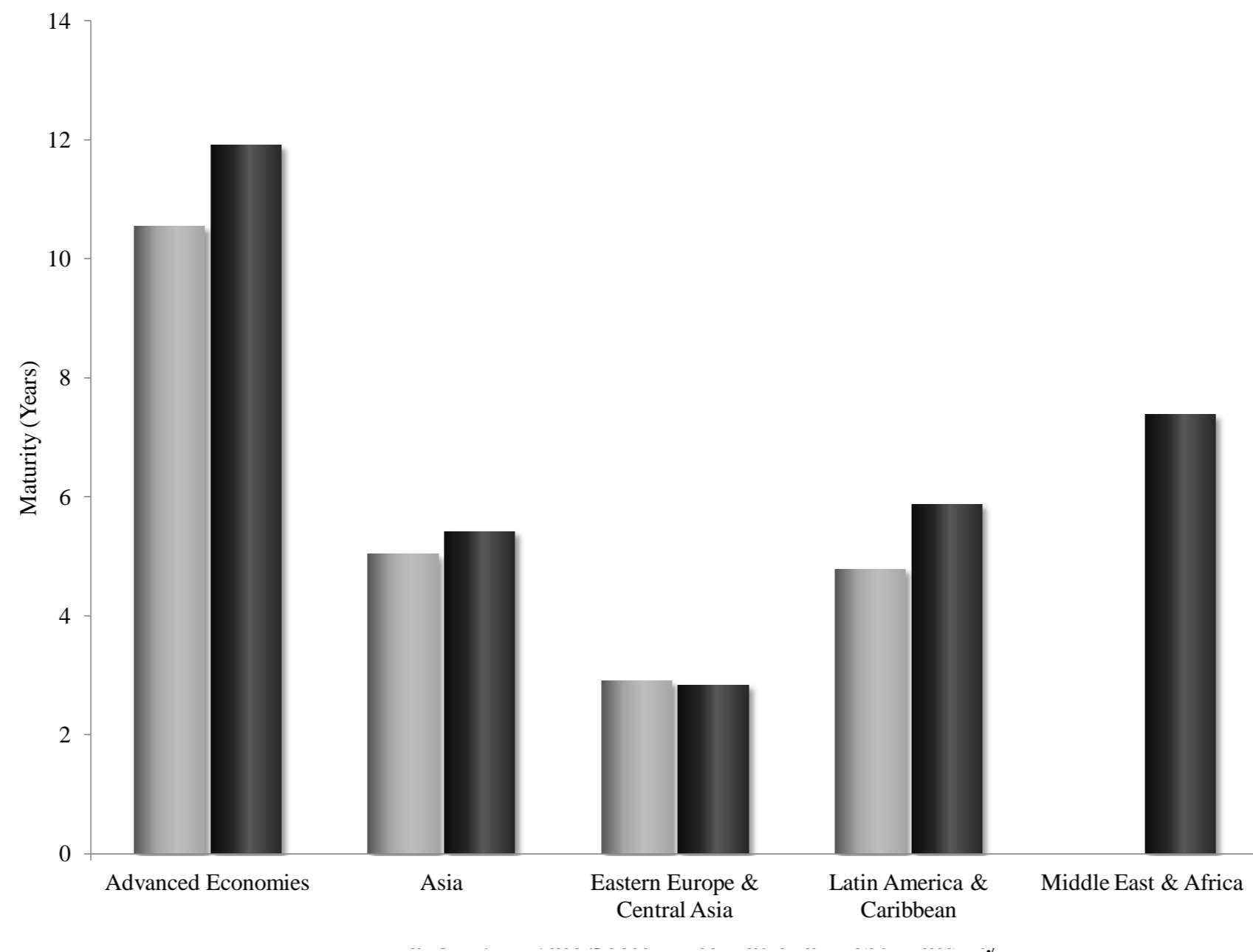
■ 1990s ■ 2000s

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and non-OECD). Economies are classified as emerging if they have access to IBRD financing, and as low income if they only have access to IDA financing.

Figure 12
Private and Public Sector Debt Maturity across Regions

Panel A: Private Sector Domestic Debt Maturity



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economies are economies classified as "High Income" under the World Bank July 2010 classification (both OECD and non-OECD). Countries not classified as advanced are assigned to regions according to the World Bank's July 2010 classification. "Middle East & Africa" includes "Middle East & North Africa" and "Sub-Saharan Africa." "Asia" includes "East Asia & Pacific" and "South Asia."

Table 1
Money Market Rates and Exchange Rates around Crises

	Panel A: Difference between Pre- and Post-Crisis Averages							
	Money Market Rates				Exchange Rates			
	Mexican Crisis	Asian Crisis	Russian Crisis	Global Crisis	Mexican Crisis	Asian Crisis	Russian Crisis	Global Crisis
Asia	48.5%	70.2%	-40.4%	-20.8%	-1.5%	23.1%	3.9%	8.3%
Eastern Europe & Central Asia	-20.9%	-4.5%	21.2%	31.1%	64.6%	28.1%	100.6%	26.2%
Latin America & Caribbean	37.0%	5.0%	21.0%	-1.7%	39.9%	7.3%	21.2%	20.5%

	Panel B: Peak-Trough Difference							
	Money Market Rates				Exchange Rates			
	Mexican Crisis	Asian Crisis	Russian Crisis	Global Crisis	Mexican Crisis	Asian Crisis	Russian Crisis	Global Crisis
Asia	275.9%	807.7%	203.6%	-42.3%	-1.5%	57.8%	50.7%	14.6%
Eastern Europe & Central Asia	-68.8%	-20.2%	-40.3%	337.6%	304.9%	77.8%	172.6%	49.3%
Latin America & Caribbean	279.1%	81.0%	127.0%	-34.2%	257.8%	16.6%	50.6%	41.4%

This table shows the behavior of money market rates and exchange rates around crisis events. Panel A shows percentage changes for money market rates and exchange rates average levels between the post-crisis and the pre-crisis windows. Panel B shows percentage changes for these rates between the peak and the trough within the pre- and post-crisis windows. If the trough is earlier than the peak, the difference in the numerator is calculated as peak minus trough, and is thus positive. The converse is true if the trough occurred after the peak (in which case the rate fell for the country during that crisis). Pre- and post-crisis windows are defined as the 12-month period before and after the starting month for each crisis. The starting month for the crises is defined as follows: Jan. 95 for the Mexican crisis, Jul. 97 for the Asian crisis, Jul. 98 for the Russian crisis, and Sep. 08 for the global crisis. Data for exchange and money market rates come from the IFS. Regional averages are weighted by 2007 nominal GDP in U.S. dollars from the World Economic Outlook (October 2010). Countries not classified as advanced are assigned to regions according to the World Bank's July 2010 classification. "Asia" includes "East Asia & Pacific" and "South Asia."