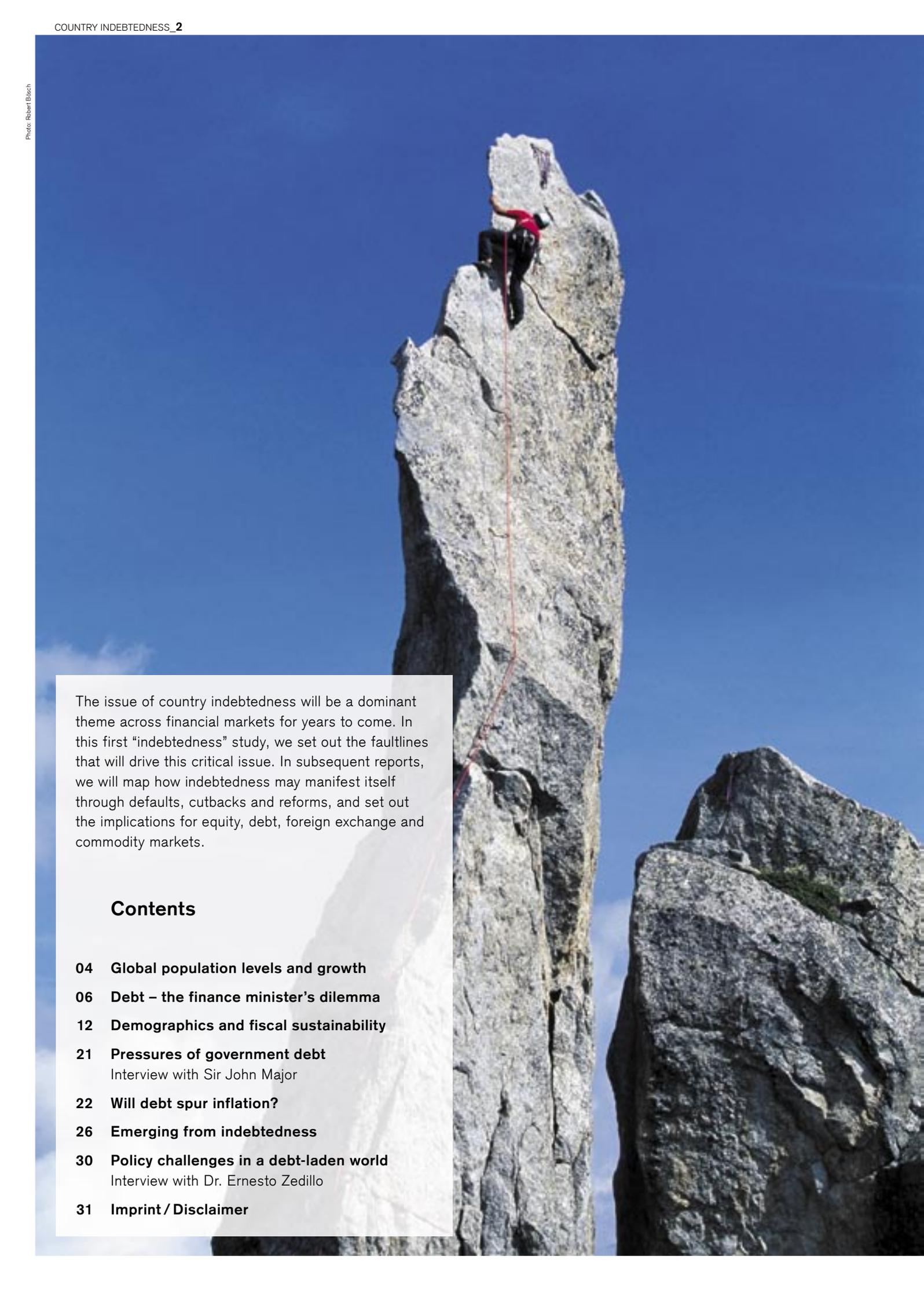


Credit Suisse Research Institute:
Thought leadership from Credit Suisse Research
and the world's foremost experts

Country indebtedness

Part 1

A photograph of a person climbing a tall, narrow rock spire. The climber is wearing a red shirt and black pants, and is secured by a red rope. The rock is light-colored and has a rough, textured surface. The background is a clear, bright blue sky. The climber is positioned near the top of the spire, which is the central focus of the image.

The issue of country indebtedness will be a dominant theme across financial markets for years to come. In this first “indebtedness” study, we set out the faultlines that will drive this critical issue. In subsequent reports, we will map how indebtedness may manifest itself through defaults, cutbacks and reforms, and set out the implications for equity, debt, foreign exchange and commodity markets.

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The rapid aging of societies, coupled with promises about healthcare and social protection, have for many years posed a long-term threat to the sustainability of public debt in a number of the world's richer countries. It had generally been assumed that some combination of growth and technological change will deal with the problem.

Unfortunately, the credit crisis has aggravated the problem – less because of capital injected into failing financial institutions, but more because the recession has reduced tax revenues and raised public spending. As Andrew Garthwaite, Michael O'Sullivan and colleagues outline on page 7, with debt-GDP ratios headed well over 100% for many major countries, there are legitimate concerns over possible ultimate adverse outcomes: inflation, taxation, controls.

The Credit Suisse Research Institute provides thought leadership on key issues, drawing on both internal and external expertise, and in this document we put into perspective the true size of the fiscal problem that the major countries face, and how the attempt to deal with the problem may end up being jeopardized by the demands of the crisis and the impact of emerging economy growth.

On page 13, Amlan Roy analyses the scale of the fiscal problem that the major countries face in the light of demographic pressures. In particular, aging, combined with the increasing scope and rising cost of healthcare provision, will affect the scale of existing deficits. He concludes that holistic reform across employment, pensions and healthcare is needed.

Following this, Robert Barrie examines the impact of high public debt on inflation and concludes that the threat is not significant in the near term, while longer-term its likelihood is largely determined by the political willingness of governments to impose appropriate fiscal measures. He notes that growth is both arithmetically and historically a very powerful escape route from higher public debt, but achieving it is challenging at a time of headwinds from weak household balance sheets.

Bunt Ghosh and Paul Fage review public finances in the emerging markets, most of which (with exceptions mainly in east/central Europe) have weathered the crisis with impressively robust public finances, reflecting varying combinations of low social entitlements, favorable demographics and simple prudence. They argue that the contrast is so great that it can be seen as accelerating the move to a more multipolar distribution of economic and political power.

On page 21, Sir John Major discusses the problems of rising government debt and its effect on policy making. His experience as a policy maker provides an invaluable perspective on the debt-related problems facing a range of nations. Similarly, on page 30, Dr. Ernesto Zedillo, former President of Mexico, considers the challenges posed to the world economy by record debt levels in the context of high unemployment and low growth.

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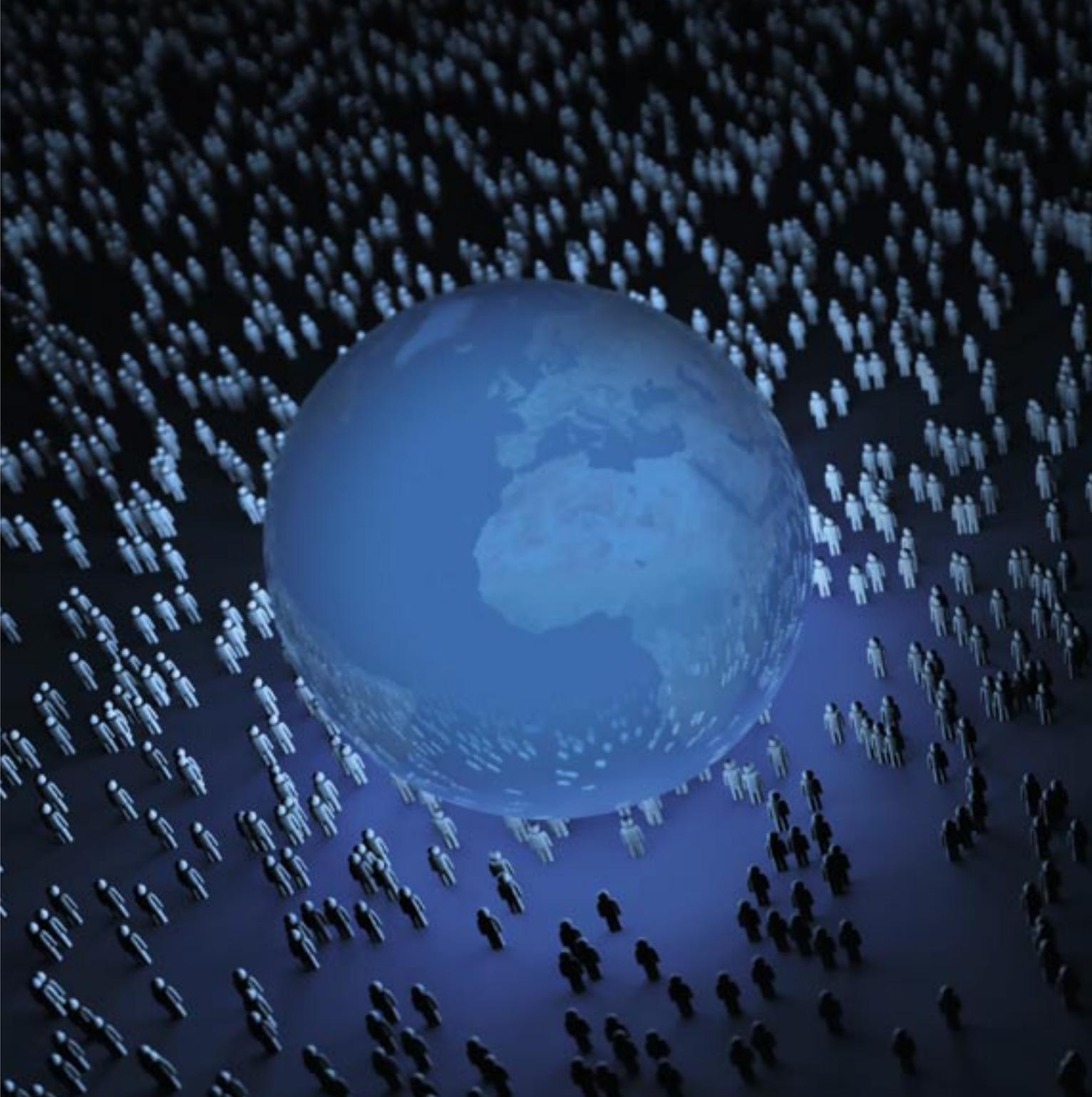
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Global population levels and growth (%)

The breakdown of the relationship between population growth and level was “historically unprecedented.” It started in the mid-1970s and its primary cause was a decrease in fertility rates, across both rich and poor countries. This evidences changed behavior of child-bearing women around the world.

Growth rate

2.5
--

2.0
--

1.5
--

1.0
--

0.5
--

0
--

Level

7 bn

6 bn

5 bn

4 bn

3 bn

2 bn

1 bn

0

Demographic pressures building

“In coming decades, many forces will shape our economy and our society, but in all likelihood no single factor will have as pervasive an effect as the aging of our population.”
Fed Chairman Ben Bernanke (4 October 2006)

“....The seriousness of the challenge depends on how our economies and societies respond and adapt to these changing demographic conditions. Looking ahead policymakers need to ensure long-term fiscal sustainability in the face of clearly anticipated risks as well as significant uncertainty.” 2009 Aging Report, Economic Policy Committee and European Commission



1 10,000 B.C. – The Agricultural Revolution

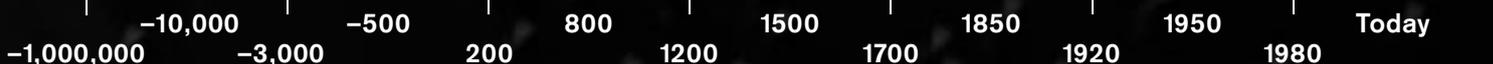
The first Agricultural Revolution created the basis for human development.

2 1348–1350 The Black Death in Europe

The Black Death led to a series of profound social, economic and religious changes.

3 1798 Malthus

Malthus predicted a catastrophic contraction in population.



The Agricultural Revolution

1

Black Death

2

Malthus

3

Today

-10,000

-3,000

200

800

1200

1500

1700

1850

1920

1950

1980



Debt – the finance minister's dilemma

As markets are putting government finances under the microscope, policymakers are under pressure to show that they can bring them back to a sustainable path, but have fewer of the necessary tools at their disposal.

Andrew Garthwaite, Head of Global Equity Strategy at Credit Suisse Investment Banking

Luca Paolini, Global Equity Strategist at Credit Suisse Investment Banking

Michael O'Sullivan, Head of UK Research, Global Asset Allocation at Credit Suisse Private Banking

Antonios Koutsoukis, Research Analyst at Credit Suisse Private Banking

The panic phase of the credit crisis is over, though the profound imbalances in the form of stretched state and household balance sheets and weak fiscal positions remain. For instance, the latest projections for gross government debt of major advanced economies by the IMF suggest that it will exceed 118% of GDP by 2014, or approximately USD 47 trillion (almost three times the size of the US economy in 2008). When other perspectives on indebtedness such as contingent liabilities (i.e. the cost of infrastructure replacement, social security or healthcare reform) and importantly demographics (rapid fertility rate declines from the end of the 1960s and increasing life expectancy) are considered, the potential burden of debt looms larger. Their size is by no means trivial: the IMF estimates that, for the group of advanced G20 economies, the impact of demographic factors on the structural primary deficit could be as high as 3.8% p.a. while the government debt-to-GDP ratio could exceed 250% by 2050.¹

For at least the next five years, the actions of states and households to reduce their indebtedness will be an important driver of asset prices and macroeconomic volatility. If the credit crisis illustrated the temptation to leverage growth with debt, the coming decade will highlight the dilemmas that face the

finance ministers, who will be confronted with fiscal deficits and enticed by the policy avenues offered by a weaker currency or asset price inflation. Policy debate in many indebted countries (e.g. Ireland and the UK) is already intensely focusing on cuts in spending and higher taxes. In particular in the developed world, the key question is whether government finances are on a sustainable path.

The burden of debt

To understand whether fiscal policy is sustainable, we must look at two issues. The first is the evolution of the primary balance (i.e. excluding interest payments) across the economic cycle, the idea being that if fiscal policy is unchanged, governments raise more money during good times and need to spend more in bad times. The second is the cost of paying interest on existing debt, which can change as old debt is rolled over and new debt is issued.

In a formal sense, the change in government debt relative to GDP is greater, the higher the interest payments relative to growth and the higher the primary budget deficit. Rapid economic growth can mute the effect of interest payments because the stock of existing debt shrinks relative to the level of GDP. Importantly, a primary budget surplus does not always translate into a fall in the government debt to GDP ratio because this requires the surplus to be large enough to offset the increase in debt due to interest payments.

¹ IMF, The State of Public Finances Cross-Country Fiscal Monitor: November 2009, Fiscal Affairs Department; IMF The State of Public Finances: Outlook and Medium-Term Policies After the 2008 Crisis, March 2009

Figure 1

Structural (cyclically adjusted) primary balance as % of GDP (2010) for advanced economies

Source: Datastream, IMF, OECD, Credit Suisse
Note: IMF estimates for Switzerland not available

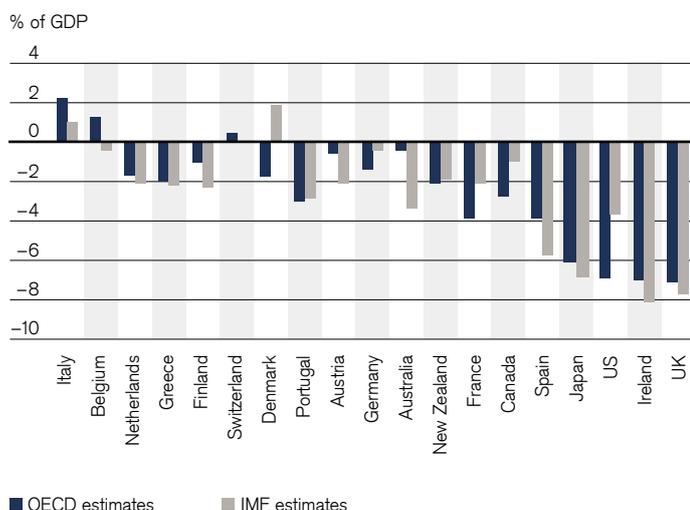
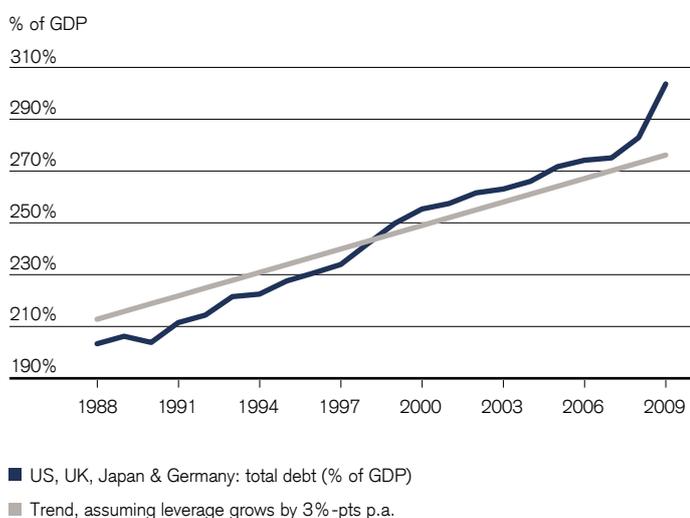


Figure 2

Total debt (household, corporate and government) as % of GDP

Source: Datastream, Credit Suisse



Even when adjusting for cyclicalities, budget deficits in advanced economies are in a precarious position (see Figure 1), even with interest rates at artificially low levels. Our colleague Amlan Roy provides further detail on the accounting behind government financial indicators on pages 13 to 19. The UK economy is in a particularly difficult position relative to other major developed economies as it has one of the highest cyclically adjusted budget deficits.

Many advanced economies have had to deal with high public debt in the past, such as after World War II. However, experience from past debt reduction episodes suggests that this usually takes many years and has historically been resolved through higher growth. However, this route is a cause of concern as many economies tick very few boxes of preconditions to growth today.

On the supply side, the pick-up in productivity growth will probably be quite strong as output recovers, though the increase in the dependency ratio (the ratio of the population not in the labor force to those who are) will be detrimental to GDP growth in the long run (as it implies lower savings and lower investment).

On the demand side, there are fewer potential sources of growth. Consumers are still highly leveraged in many countries, while their net worth (in the sense of household balance sheets) has declined substantially as a result of the credit crisis. We do not expect a significant stimulus from consumption unless asset prices rise substantially (not unlikely given the liquidity in place) and unemployment begins to reverse. In short, the problem on the demand side is that aggregate debt (consumer, corporate and government) to GDP of the G4 economies is some USD 7 trillion above trend (Figure 2).

What to do about debt?

With GDP growth at low levels, finance ministers may have limited options in attempting to control public debt. The dilemma of the degree of fiscal tightening required to stop debt from rising can be illustrated with the following example for the US economy: if we were to assume that US GDP grows at 2.5% to 3% and real US bond yields were allowed to return to equilibrium – say 2.5% – then fiscal policy needs to be tightened by 7% of GDP (equal to the primary deficit) in order to stop the public debt ratio from rising. This would require federal government spending to fall by approximately 30%. This sort of fiscal tightening, even if spread over a long period of time, would come at a high political and economic cost. Moreover, if fiscal tightening just led to another recession, then fiscal policy would have to be eased again!

Given that fiscal tightening of this magnitude may be unpalatable to finance ministers and that rapid GDP growth cannot come about easily, governments are left with limited choices to keep debt under control: default, cap real bond yields or more radically engineer a one-off inflation followed by a capping of real interest rates (perhaps via exchange rate controls or bank capital requirements). The first choice will only be contemplated in extremis, so we will focus our attention on the second option.

If, for example, the US government keeps real interest rates at around zero, fiscal policy would have to be tightened by around 5% of GDP, implying that inflation would equal the nominal bond yield. This would not be without a historical prec-



Photo: Robert Bosch

edent: from 1942 to 1951, the Federal Reserve capped the 3-month Treasury bill rate at 0.375% and US bond yields at 2.5% by announcing it would buy or sell any amount offered at those yields. At the time, the average inflation rate was at about 6%, resulting in average real bond yields of minus 3.5%. The government to GDP ratio peaked at 121% in 1945 and fell to 76% in 1951 (Figure 3).

Today, this could be implemented by a combination of quantitative easing (QE) and control mechanisms, such as “encouraging” banks to buy more government bonds (through changes to capital ratio requirements for example), which also happened in the early 1940s when, according to Milton Friedman, purchases of government securities accounted for 90% of the increase in commercial banks’ assets. It must be recognized that, under the current circumstances, this approach could well sow the seeds of another banking crisis and would be likely to limit growth.

Quantitative easing and inflation

The result of extending QE in some economies would be to reduce the value of the respective currencies and cause inflation to rise. Incidentally, countries with the greatest need to cap bond yields are the countries where there is more flexibil-

Figure 3
US real bond yield and government debt

Source: Federal Reserve Bank of St Louis, Credit Suisse

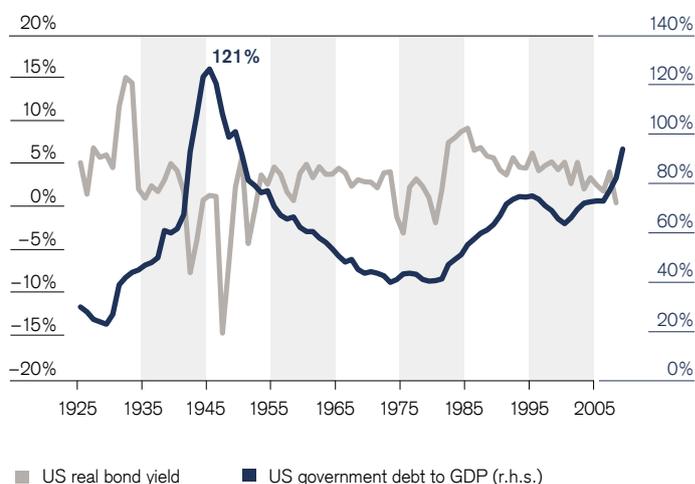
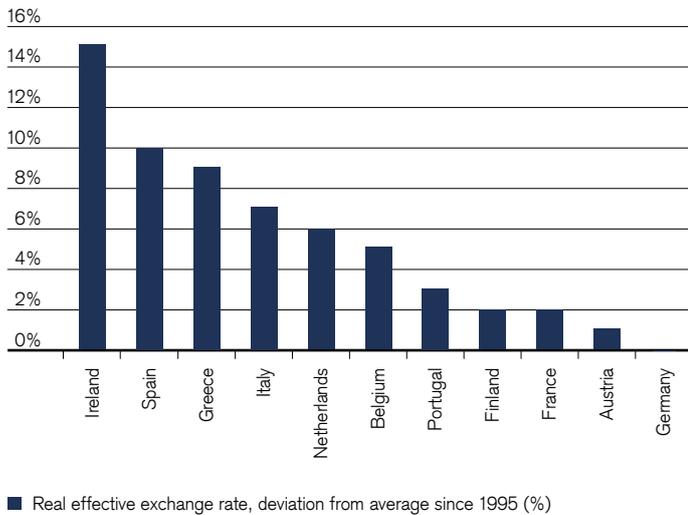


Figure 5

Real effective exchange rates for Eurozone economies

Source: Datastream, Credit Suisse



ity to change central bank charters to allow bond yields to be capped and inflation to rise above current targets. For instance, in the UK, politicians can just change the inflation target the Monetary Policy Committee takes. Figure 4 supports this by highlighting that the UK, USA and Japan face the greatest problems in terms of the degree of fiscal tightening required in the major OECD countries to stabilize government debt.

Currency depreciation versus the euro and emerging market currencies could also benefit the US and UK economies by improving trade balances, the savings rate and contributing to the elimination of global imbalances. Exchange-rate adjustment is, however, not an option for peripheral European economies such as Greece, Spain and Ireland that suffer from lack of competitiveness (Figure 5), yet have no control over monetary policy. These economies can only restore competitiveness through either relative productivity growth or wage deflation.

Another way of keeping real yields depressed would require banks to substantially increase their holdings of government securities. Figure 6 shows that in 1993, US banks had 20% of their assets in bonds (compared to just 11% currently). If banks were to hold 20% of their assets in government bonds, then banks would have to buy USD 1.1 trillion worth of bonds, thus funding nearly two thirds of the budget deficit projected for 2010.

The danger for government funding will in our opinion arise when bank loan growth starts to pick up. If banks can earn more by expanding consumer and corporate loans, lending to the government can be "crowded out," thus causing yields to rise. Easier lending standards suggest that loan growth could resume after the first half of 2010 (Figure 7).

When can debt become toxic?

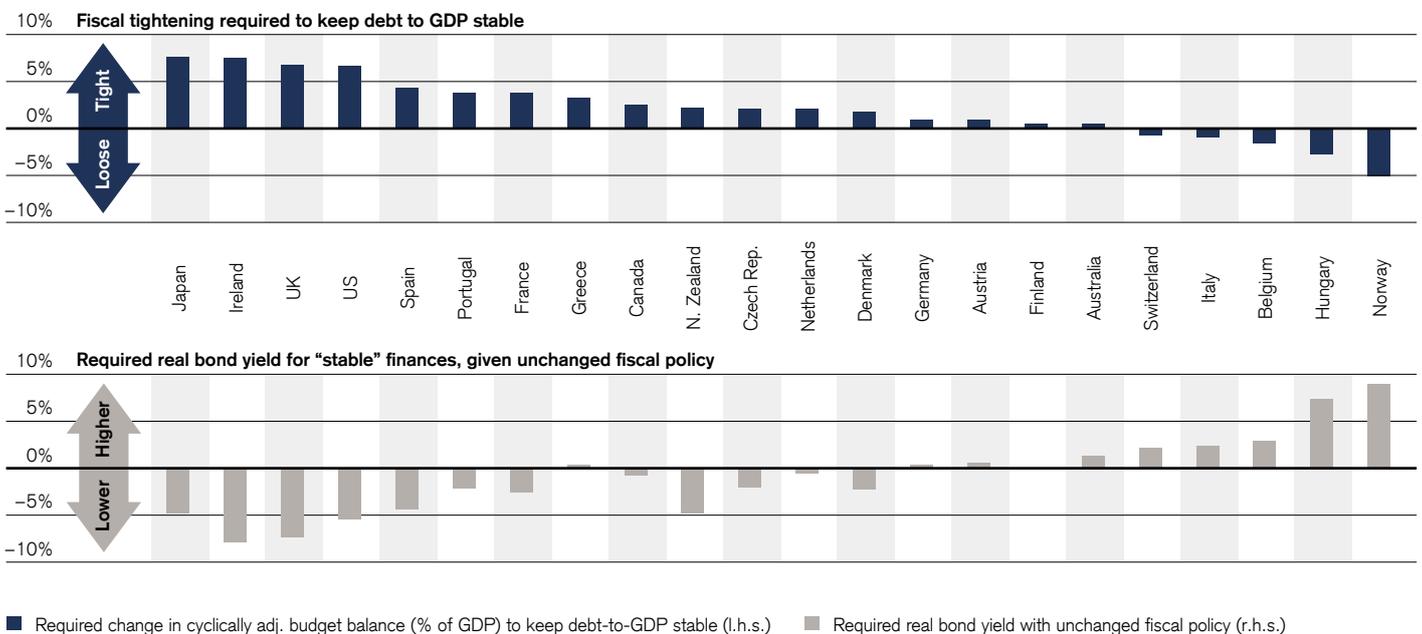
High debt is a cause of worry, but uncertainty remains as to the level when it begins to become "toxic." Japan, for example, has avoided a debt crisis despite gross and net government

Figure 4

Alternative policy options to keep the public debt-to-GDP stable

Source: Credit Suisse

Note: Fiscal tightening computation assumes that real bond yields equal 2.5%.



debt-to-GDP ratios of 197% and 88%, respectively, in 2008 according to the IMF. Moreover it has experienced several years of anemic growth – trend economic growth is between 1% and zero according to our estimates – while population is declining and real bond yields are at 2.4%. Does this mean that the USA, with an expected gross debt of 85% of GDP in 2009, has little to worry about?

Under closer scrutiny, the USA does not fare well in a comparison with Japan. Foreign assets in Japan are nearly 50% of GDP and thus a depreciation of the yen would boost their relative value, which can potentially shield the economy in a funding crisis. This compares to net foreign debt holdings of just 20% of GDP in the USA.

Furthermore, the majority of Japanese debt is owned by domestic companies such as the Post Office, which means that it would be a lot easier for the government to monetize the debt. Only 8% is held by foreigners against about half of marketable Treasury securities in the USA. Bank lending growth and private sector growth have been very weak for the past 20 years, which is something that is unlikely to happen in the USA, with 2008 nominal GDP down by 1.6% since 1997.

Despite Japan's particularities, it is not a foregone conclusion that it will avoid a debt crisis in the future. The prospect of a funding crisis for one of the advanced economies may seem distant, but investors are ever aware of the dangers of debt going beyond control as Dubai's experience has shown. A focus on economic growth is the best way forward.

Economic growth is the solution to indebtedness

Overall, our strong instinct is that economic growth is the only satisfactory solution to deal with the debt problem, and that the overall policy framework has to be set to foster growth. In the near term, we suspect that fears of a government bond funding crisis are overblown and we expect upward pressure on bond yields to be limited until there is a pick-up in private sector credit growth (and the associated rise in bank lending growth). Ultimately, it seems probable that some monetization of debt has to occur in the USA, UK and Japan if real bond yields are to return to equilibrium. We suspect policy-makers will err on the side of inflation policy mistakes rather than deflationary policy mistakes. In time, policy makers may undertake more forceful and innovative supply-side measures, as was the case in the USA and UK in the 1980s. While high levels of debt need do not necessarily lead to rampant inflation, the policies designed to deal with the debt could result in inflation in the long run. On a broader scale, a rebalanced, less adversarial relationship between the USA and China may hold the key to the eventual resolution of global financial imbalances. ■

Figure 6

Government securities as % of total assets of US banks

Source: Datastream, Credit Suisse

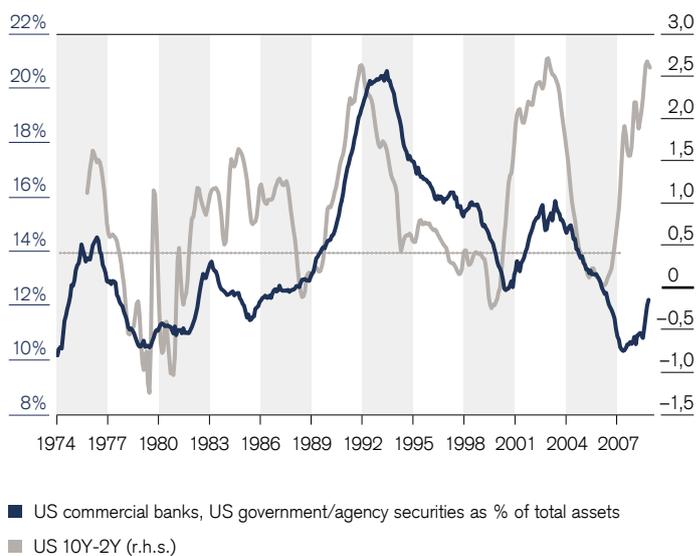


Figure 7

Credit standards and loan growth

Source: Datastream, Credit Suisse





Demographics and fiscal sustainability

Demographic trends, such as aging, can exert an enormous toll on government finances, and are crucial in the way they influence and cause “hidden” and “future” liabilities on government balance sheets.

Dr. Amlan Roy, Head, Global Demographics & Pensions Research at Credit Suisse Investment Banking, assisted by **Sonali Punhani**, Fixed Income and Economics Research at Credit Suisse Investment Banking

Rapid and unprecedented demographic changes are adversely affecting most advanced countries. In this article, we provide a selective assessment of the major demographic changes, current as well as projected, on the fiscal sustainability of countries. The governments of rich countries face the prospect of much slower GDP growth due to the combined effect of aging populations and labor forces. Slowing GDP growth along with the obligations to fulfill longer-term past promises made to citizens are leading to large fiscal strains and unsustainable finances in many of the most advanced nations.

We feel strongly that current measures of fiscal deficits and debt do not adequately account for these long-term fiscal burdens and highlight two alternative approaches, namely “Fiscal Sustainability Gap” and “Generational Accounting,” which try to address these limitations of commonly used fiscal deficit measures. In the light of this analysis, countries need to embrace active policies that will help them address their demographic challenges and thereby improve their fiscal sustainability.

We present an initial overview of the adverse demographics (e.g. lower fertility rates and higher life expectancy in the developed world – see Figures 1 and 2) and the current fiscal positions of nine selected advanced countries. Next, we discuss the government expenditure projections related to longer-term aging (Table 4 shows how age-related spending in certain countries could nearly double) and their underlying drivers. After that, we focus on the limitations of short-term fiscal measures and we emphasize how the concepts of Fiscal Sustain-

Figure 1

Total fertility rate

Number of children per woman of child-bearing age

Source: Credit Suisse, United Nations

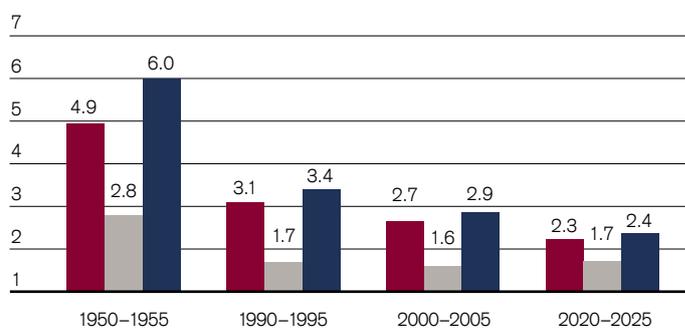


Figure 2

Life expectancy

Years; both sexes combined

Source: Credit Suisse, United Nations

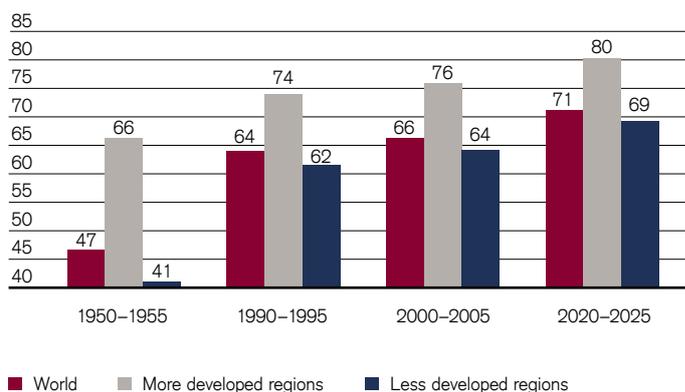
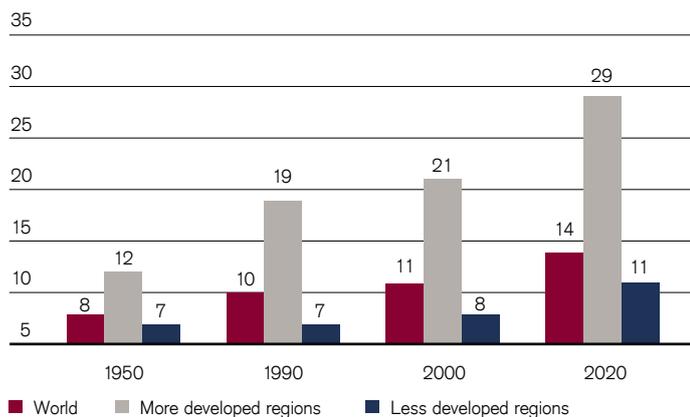


Figure 3**Old-age dependency ratio: Regions**

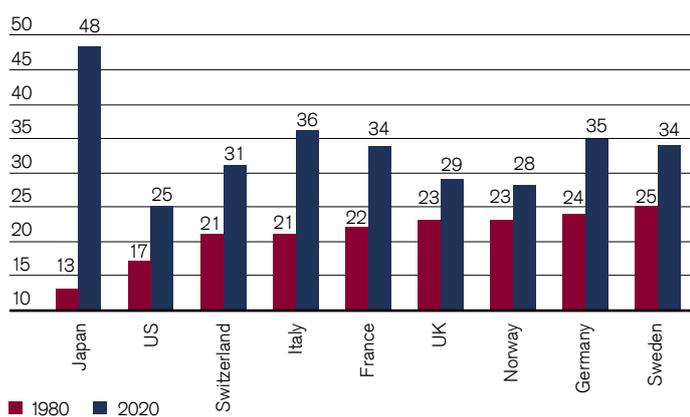
Ratio of 65+ population per 100 working age persons (15–64 years old)

Source: Credit Suisse, United Nations

**Figure 4****Old-age dependency ratio: Countries**

Ratio of 65+ population per 100 working age persons (15–64 years old)

Source: Credit Suisse, United Nations



“... The seriousness of the challenge depends on how our economies and societies respond and adapt to these changing demographic conditions. Looking ahead, policymakers need to ensure long-term fiscal sustainability in the face of clearly anticipated risks as well as significant uncertainty”

2009 Aging Report, Economic Policy Committee and European Commission

ability and Generational Accounting can bring further clarity to the analysis of government finances. We conclude by suggesting policy measures in the areas of pensions, healthcare and long-term care.

Global and country demographics

We present aging-related statistics over 1950–2020 that contrast the more developed regions of the world with the less developed regions. Figures 1–3 provide strong evidence in support of the faster pace of aging in advanced regions relative to poorer regions, while Figure 4 focuses on relative aging among nine selected advanced countries.

Figure 1 contrasts the fertility rate (number of children per woman of child-bearing age) of poorer relative to richer regions. The fertility rates of the less developed regions are higher than those of the developed regions, but the gap is narrowing from 3.2 (6 in less developed versus 2.8 in more developed) in 1950–55 to 0.7 (2.4 in less developed versus 1.7 in more developed). Figure 2 shows that the richer countries have much higher life expectancies than the poorer countries, although slow convergence is occurring as medical advances spread to the poorer countries. The life expectancy difference between more and less developed regions was 25 years (66 versus 41) in 1950–55 and has narrowed to 11 years (80 versus 69).

Figure 3 presents the critical demographic feature underlying fiscal strains of the older and richer countries, i.e. the old-age dependency ratio, which has dramatically increased for rich versus poor countries over 1950–2020. This highlights the greater pace of aging in richer countries. Figure 4 shows the range of old-age dependency ratios, which have nearly doubled at the lower and upper end over the 1980–2020 period. In 2020, Japan is projected to stand out as the country with the highest old-age dependency ratio followed by a tight pack of four countries: Italy, Germany, France and Sweden.

Overall, the combination of the post-war baby boom, the rapid fertility rate declines from the end of the 1960s and increasing life expectancy are leading to the progressive aging of the population in the richer countries. This will impact their public finances significantly as the baby-boom generation reaches retirement age in coming decades. Policy makers in these rich countries need to worry about how living standards will be affected with higher old-age dependency ratios and substantially lower GDP growth.

Fiscal positions and age-related government expenditures

The fiscal positions of the nine selected countries – France, Germany, Italy, Japan, Norway, Sweden, Switzerland, the UK and the USA – are shown in Table 1. Note that the fiscal deficits reached their highest levels in 2009, which is not a surprise given the scope and magnitude of the current crisis. Beyond the near term, the fiscal positions are projected to improve in the medium term, but remain weaker than those before the crisis, reflecting demographic forces in most of these countries except Germany. In comparative terms, the general government balances of the USA and the UK are the weakest for 2009, again not surprisingly given the greater and broader impact of the current crisis in terms of employment,

Table 1

General government balance (as % of GDP)

Source: Credit Suisse, World Economic Outlook, IMF

	1990	2000	2005	2009
France	-2.43	-1.46	-2.92	-7.03
Germany	-2.00	1.31	-3.31	-4.16
Italy	-11.44	-0.83	-4.30	-5.60
Japan	2.04	-7.64	-5.04	-10.46
United Kingdom	-1.55	1.35	-3.27	-11.58
United States	-4.24	1.60	-3.20	-12.46
Switzerland	-0.21	2.17	0.08	-1.54
Norway	2.20	15.37	15.09	7.12
Sweden	3.36	3.75	2.03	-3.49

Table 2

General government gross financial liabilities

Source: Credit Suisse, IMF, OECD

	% of nominal GDP			In USD bn	Per capita (USD 000's)
	2000	2005	2009	2009	2009
France	65.6	75.7	86.4	2,275.7	36.50
Germany	60.4	71.1	78.2	2,530.0	30.79
Italy	121.0	119.9	122.9	2,567.9	42.89
Japan	135.4	175.3	189.6	9,571.5	75.27
Norway	34.2	49.1	63.3	233.7	48.56
Sweden	64.7	61.5	53.1	211.2	22.84
Switzerland	52.5	56.5	46.4	224.4	29.65
United Kingdom	45.1	46.1	75.3	1,656.0	26.90
United States	55.2	62.3	87.4	12,474.9	39.65

GDP, industry and other broad economic measures, including business and consumer sentiment. These are well-known problems and there is a broad range of literature on why the widely reported conventional fiscal deficit measures do not always work and their limitations. There also exists a set of alternative fiscal deficit measures, each with its own advantages and disadvantages. As the IMF reports:¹ "Although the deficit measure is relevant primarily as an indicator of the macroeconomic consequences of fiscal policy, the set of consequences that policymakers desire to assess may itself determine the 'correct' deficit measure."

Next, the measure of public indebtedness in Table 2 shows the general government financial liabilities as a percentage of GDP. We convert those liabilities to USD billions and then to a per capita basis for 2009 in order to facilitate cross-country comparisons.

An important issue here is that the conventional measure of the fiscal deficit (government expenditures less current revenues) has widely accepted limitations as a measure of excess public demand. Therefore, the use of just one number to assess the impact of fiscal policy on aggregate demand, inflation and

¹ Chapter 1 by M Blejjer and A Cheasty in "How to Measure the Fiscal Deficit", IMF (1993)

Table 3**Life expectancy at average effective age of retirement (years)**

Source: Credit Suisse, OECD (Live Longer, Work Longer, 2006)

	Men		Women	
	1970	2004	1970	2004
France	10.8	21.4	13.4	26.2
Germany	10.5	18.9	13.9	23.8
Italy	13.1	20.6	18.4	23.9
Japan	8.5	14.8	13.1	22.0
Norway	12.2	17.4	13.9	21.9
Sweden	11.9	17.8	14.9	22.9
Switzerland	9.0	16.8	10.8	21.7
United Kingdom	10.5	17.6	15.3	21.9
United States	11.0	17.1	14.7	21.0

“In coming decades, many forces will shape our economy and our society, but in all likelihood no single factor will have as pervasive an effect as the aging of our population.”

Fed Chairman Ben Bernanke
(4 October 2006)

other macroeconomic variables needs to be de-emphasized and the broader fiscal situation should be analyzed.

For example, inflation makes fiscal performance evaluation difficult when debt composition changes over time and confounds international comparisons of countries' fiscal deficits with varying inflation and differing debt profiles.

A very important element of government policy is ignored in the conventional fiscal deficit measures, namely the adoption of contingent liabilities, such as deposit insurance (very important during the recent crisis), social security, health insurance and loan guarantees, which do not generate a current cash flow, but rather an obligation regarding future cash flows. In this light, we later define and discuss a newer macroeconomic concept of fiscal sustainability that has been developed to deal with this issue and which governments are paying greater attention to.

Aging populations strain finances

A country's aging population strains its finances due to increased age-related spending on pensions, healthcare and long-term care. In Table 3, we show how life expectancy beyond effective retirement ages has increased over 1970–2004. While life expectancy increases have been fairly uniform across rich countries, the retirement periods are not that close, particularly for males.

As shown in Table 4, on the basis of current policies, age-related public expenditure in the EU-27 is projected to increase from 2007 levels by about 2.7 percentage points of GDP by 2035 (4.7 by 2060). Most of the projected increase in public spending over the 2007–2035 period will be on pensions. According to one of the scenarios – which takes into account the combined impact of aging, potential improvements in health status, and the effect of changes in the national income – public expenditure on healthcare is projected to grow over 2007–35 by 1.0% of GDP in the EU-27. Demographic change also increases the additional expenditures in healthcare and long-term care.

In the USA, according to the Congressional Budget Office (CBO) in 2009, projected growth in US entitlement spending explains almost all of the projected growth in total non-interest spending –and the two big government healthcare programs largely drive that increase. Medicare and Medicaid are responsible for 80% of the growth in spending on the three largest entitlements over the next 25 years and for 90% of that growth by 2080.

Public pension spending

In Japan, according to simulation results by Fukawa and Sato (2009), Japanese public pension expenditure will be 10.7% of GDP, health expenditure will be 8.9% of GDP, and long-term care expenditure will be 2.8% of GDP in 2030.

It is important to analyze the drivers behind increased pension expenditures. Most of the share of increase in public pension expenditure is due to old age and early pensions. In the USA, the CBO projects that the number of workers per social security beneficiary will decline significantly over the next three decades. In the EU-27, the public pension spending ratio is expected to increase considerably during 2020–2040. The decomposition of the overall change in the public pension

Table 4

Age-related expenditure components (% of GDP)

Source: Credit Suisse, OECD, FFA, CBO, JPSS

Country	Pensions			Healthcare			Long-term care			Total		
	Level	Change from 2007		Level	Change from 2007		Level	Change from 2007		Level	Change from 2007	
	2007	2035	2060	2007	2035	2060	2007	2035	2060	2007	2035	2060
EU-27	10.2	1.7	2.4	6.7	1.0	1.5	1.2	0.6	1.1	23.1	2.7	4.7
UK	6.6	1.3	2.7	7.5	1.2	1.9	0.8	0.3	0.5	18.9	2.7	5.1
Germany	10.4	1.4	2.3	7.4	1.4	1.8	0.9	0.7	1.4	23.6	2.6	4.8
France	13.0	1.4	1.0	8.1	1.0	1.2	1.4	0.5	0.8	28.4	2.7	2.7
Norway	8.9	4.3	4.7	5.6	1.0	1.3	2.2	1.2	2.7	24.9	6.8	9.0
Sweden	9.5	-0.1	-0.1	7.2	0.6	0.8	3.5	1.3	2.3	27.2	1.5	2.6

Source: European Commission, EPC 2009

Country	Old age/disability insurance			Healthcare			Long-term care			Total		
	Level	Change		Level	Change		Level	Change		Level	Change	
	2005	2050	2005–50	2005	2050	2005–50	2005	2050	2005–50	2005	2050	2005–50
Switzerland	10.3	13.1	2.8	4.4	5.8	1.4	0.5	1.4	0.8	15.2	20.2	5.0

Source: Federal Finance Administration, 2008

Country	Social security			Total Medicare			Total Medicaid		
	Level	Level		Level	Level		Level	Level	
	2009	2050	2080	2009	2050	2080	2009	2050	2080
USA	4.8	5.7	6.1	3.5	9.0	13.5	1.8	3.2	3.7

Source: Congressional Budget Office, June 2009

Country	Pension			Healthcare			Long-term care		
	Level	Level		Level	Level		Level	Level	
	2010	2030	2050	2010	2030	2050	2010	2030	2050
Japan	9.7	10.7	13.7	7.1	8.9	7.3	1.5	2.8	4.3

Source: The Japanese Journal of Social Security Policy, August 2009

spending to GDP ratio over the period 2007–2060 in EU-27 is given in Table 5.

In the EU-27, the main contributor to the increase in the ratio of pension expenditure to GDP is represented by demographic factors (captured by the old-age dependency ratio), ranging from +4.2 percentage points to +8.4 percentage points in the case of the UK and France, respectively. It needs to be stressed that, for many member states, the **increase in the old-age dependency ratio** is the only factor pushing the pension to GDP ratio upward, while the remaining evolution of the other three factors contributes to keeping down the evolution in the pension/GDP ratio

The projected increase in healthcare spending in EU-27 is driven mostly by the change in the **demographic structure of the population**. Its impact is measured by the “pure demographic scenario,” which projects an average increase of 1.7% of GDP. In the USA, both aging and excess cost growth will push up federal spending for Medicare and Medicaid as a share of GDP because growing numbers of elderly people will need increasingly expensive healthcare.

Table 6 attributes the expenditures on social security, Medicare and Medicaid to two components – aging and the increased cost of benefits. There are two time periods over which this decomposition takes place: 2009–2035 and 2009–2080. Over the period 2009–2035, an aging population explains 64% of spending growth in Medicare, Medicaid, and social security in the USA. In contrast, over the longer 2009–2080 period, the growth in healthcare spending per beneficiary is a more important explanatory factor than population aging.

How to measure fiscal sustainability

The concept of Fiscal Sustainability relates to a government's ability to indefinitely maintain the same set of policies while remaining solvent. An unsustainable set of policies would thus lead to insolvency if indefinitely maintained and governments often change their policies if it becomes clear that they are unsustainable. The focus of fiscal sustainability is not only on default per se, but also on the consequences of policy changes needed to avoid eventual default. Additionally, fiscal sustainability analysis looks at the ongoing costs associated

with a particular combination of fiscal and monetary policies. Two commonly used measures used to analyze a government's fiscal position are government balance and government debt, which are related by the following government budget constraint: net issuance of debt = interest payments – primary balance (revenue minus non-interest expenditure) – seigniorage (net revenue derived from the issuing of currency). This budget constraint also connects monetary policy to fiscal policy showing the interaction of currency issuance and debt issuance.

Table 7 provides an at-a-glance summary of the different fiscal gap indicators for the countries/regions. What is important to appreciate is that different countries have different fiscal objectives as their targets, which ultimately influences the fiscal gaps that they calculate.

The European Commission's Sustainability Report 2009 derives two main sustainability gap indicators that show the size of the permanent budget adjustment required to ensure that the public budget constraints are met. The first indicator (S1) shows the adjustment to the current primary balance required to reach a target government gross debt of 60% of GDP in 2060, including paying for any additional expenditure arising from an aging population. The second indicator (S2) shows the adjustment to the current primary balance required to fulfill the infinite horizon inter-temporal budget constraint, including paying for any additional expenditure arising from an aging population.

These indicators show a sustainability gap of 5.4% (S1 indicator) and 6.5% (S2 indicator) of GDP for the EU-27, with a wide variation between countries. For example, the sustainability gap as measured by S1 ranges from 10.8% for the UK and 12.1% for Ireland, which have the largest gaps in the EU-27, to –1.1% for Hungary and –0.6% for Denmark, which show no sustainability gaps. The long-term cost of aging has a significant fiscal impact on these measures.

A 2008 report along similar lines about the long-term sustainability of public finances in Switzerland (Federal Finance Administration) suggested that Swiss public finances were in much better shape than the EU average. In the USA, the **fiscal gap** calculated by the CBO 2009 is 2.1% of GDP over the next 25 years and 3.2% of GDP over the next 75 years. In

Table 5

Public pension expenditure to GDP ratio decomposition

Source: Credit Suisse, EPC & European Commission

Sources of change from 2007 to 2060 (in percentage points)

	2007 level	Dependency ratio ¹	Coverage ratio ²	Employment effect ³	Benefit ratio ⁴	Interaction effect ⁵	2060 level
EU-27	10.1	8.7	–2.6	–0.7	–2.5	–0.6	12.5
UK	6.6	4.2	–1.4	–0.3	0.5	–0.3	9.3
Germany	10.4	7.9	–1.9	–0.8	–2.2	–0.8	12.8
France	13.0	8.4	–2.2	–0.5	–4.0	–0.7	14.0
Norway	8.9	8.2	–1.2	0.3	–2.4	–0.2	13.6
Sweden	9.5	5.6	–0.4	–0.4	–4.3	–0.6	9.4

¹Population 65+/population 15–64; ²Number of pensioners/population 65+; ³Population 15–64/working people 16–64; ⁴Average pension/GDP/hours worked 15–71; ⁵Working age 15–64/hours worked 15–71

other words, an immediate and permanent reduction in spending or an immediate and permanent increase in revenues equal to 3.2% of GDP would be needed to create a sustainable fiscal path for the next three-quarters of a century.

Policy recommendations for aging countries

Coping with the budgetary impact of aging requires a three-pronged strategy in our view.

First, aging countries need to achieve and sustain sound budgetary positions and to run down public deficits and debts faster. This would stimulate low interest rates and high and stable economic growth.

Second, countries need to raise employment rates, especially among women and older workers, and also to raise labor productivity. Successfully implementing measures that increase employment and enhance productivity would raise potential growth rates and improve future living standards as well as contribute to sustainability.

Third, countries need to reform pension, healthcare and long-term care systems to ensure they are viable and adequate. However, pension reforms will be fully successful only if they are accompanied by longer and more flexible working lives. This would enable a higher accumulation of pension rights and would have a positive impact on the level of pensions relative to wages in the future.

Aging countries need to undertake specific policy measures to deal with pensions, healthcare and long-term care issues. The specific issues which need to be addressed as part of pension reforms are the following (1) tightening of eligibility rules for public pensions by increasing retirement ages and implementing penalties as deterrents for early retirement (2) promoting employment for older workers and (3) reducing generosity of pensions relative to wages. This will necessitate changes in training, education, tax systems, employment rules, etc.

The above complement the original recommendations in "New Jobs, New People – The Demographic Manifesto," a Credit Suisse Research publication (2000) addressing most aging countries (e.g. Japan, Italy, Switzerland, Germany) and their policymakers. Here we argued that countries ought to adopt a mix of four policies to deal with the demographics time-bomb: flexible enabled working with abolition of mandatory retirement ages, increased female labor force participation with use of new technologies, selective migration and outsourcing/off-shoring of non-core jobs. A very brief snapshot that indicates policy measures taken by aging countries includes measures to promote fertility (France), changes in retirement ages, with pensioners re-engaging flexibly in the work force (Japan), outsourcing and off-shoring (Germany and Japan), selective immigration (US, UK), encouraging women to better balance work and family life (tax benefits, crèches, etc. in Nordic countries and the Netherlands).

A holistic reform process across employment, pensions, healthcare, long-term care, education and training, as well as migration is needed. It is a tough ask for governments that take the short-term view, but the alternative of fiscal bankruptcy and downgrades is far worse. ■

Table 6

Sources of age-related projected spending: (Medicare, Medicaid and social security)

Source: Credit Suisse, CBO 2009

	Aging	Excess cost growth
(in %)		
2009–2035	64	36
2009–2080	44	56

Table 7

Fiscal gap indicators – selected countries and regions (% of GDP)

Source: Credit Suisse, CBO, FFA, EPC

Adjustment required to current primary balance to:		
Attain government gross debt of 60% of GDP in 2060 (S1 indicator)	EU	5.40 %
Satisfy infinite horizon intertemporal budget constraint (S2 indicator)	EU	6.50 %
Attain the debt target of 2003 debt ratio, i.e. 49 % of GDP in 2050	Switzerland	1.40 %
Attain the debt level from 2003, i.e. CHF 216 billion in 2050	Switzerland	2.00 %
Attain the debt to GDP ratio over 25 years as prevailed in 2009	USA	2.10 %



Accounting for deficits

The backward-looking nature of conventional measures such as deficits and debt make it difficult to gauge whether future fiscal commitments are affordable or not. Following criticism of conventional fiscal deficit measures to account for a government's longer-term fiscal obligations, **Generational Accounting** was developed as an alternative approach. As part of generational accounting measures to assess the long-term fiscal health of countries around the world, Auerbach, Kotlikoff and Liebfriz (1999)² proposed two measures. The first one is **Fiscal Imbalance** which equals the current level of debt held by the public plus the present discounted value of future federal non-interest expenditures less the present discounted value of future federal receipts. Hence it shows the extent to which current fiscal policy is not sustainable and equals zero for a sustainable policy.

The second measure – the **Generational Imbalance** – captures the intergenerational redistributive effects of policies such as pay-as-you-go pension plans. It helps us answer the question: which generation will pay for what the government spends? This measure calculates the contribution of past and current generations to fiscal imbalance, i.e. the amount of overspending by past and current generations under current law.

Such a measure is highly useful in looking at the fiscal impact of pay-as-you-go pension systems. A strict pay-as-you-go financed retirement benefit has no effect on either traditional budget measures or on Fiscal Imbalance since the

costs of such a program are, by construction, financed out of contemporaneous receipts. Still, such a program would transfer resources toward older people who would receive a benefit without having paid much in taxes when working. This transfer to older generations is financed by younger and future generations, who pay more taxes under this program relative to their benefits in present value. According to Auerbach, Gokhale and Kotlikoff,³ in the US case, had the government historically labeled contributions to social security as “loans” to the government, rather than as “taxes,” the official US debt would be more than three times its current level.

Thus Generational Imbalance can be interpreted as the amount of “implicit debt” under current fiscal policy that past and current generations are passing to future generations, who must finance it through tax payments in excess of their benefits in present value. Generational Accounting indicates how changes in policies alter different generations' present expected values of their remaining lifetime net payments to the government. A generational account is thus a set of numbers, one for each existing generation, indicating the average remaining lifetime burden imposed by the government on members of the generation.

² Generational Accounting Around The World (1999), Alan Auerbach, Larry Kotlikoff and Willi Liebfriz, National Bureau of Economic Research.

³ Generational Accounting: A New Approach for Understanding the Effects of Fiscal Policy on Saving by Alan J. Auerbach, Jagadeesh Gokhale, and Laurence J. Kotlikoff, 1992

Pressures of government debt

Sir John Major discusses the problems of rising government debt and its effect on political relations and countries' domestic policies.

Research Institute: IMF projections show rapidly rising government debt in high-income countries. Is this likely to happen?

Sir John Major: Yes, I believe it is. While growth (and hence government tax receipts) remain low, it is likely that further borrowing will inflate debt in high income countries because fixed and unavoidable costs – notably upon social expenditure and unemployment – will inexorably rise. The extent of the overall rise in debt will depend on whether (and how much) alternative public expenditure saving can be found. Such savings are always difficult to identify and, sadly, often end up as reductions in capital expenditure. Whenever this occurs, it is likely to slow growth both in the short and long term. This has the perverse effect of leaving debt higher for longer since it is the proceeds of growth that historically lowers debt levels.

The same projections suggest many emerging market countries having much lower debt. Is this plausible?

Sir John Major: Emerging countries do not, as a rule, have such high social expenditure commitments as more mature economies, and are more easily able to restrain costs in periods of low growth. However, as they develop and grow, the demand for such safety-net expenditure is bound to increase and therefore, although their debt is far lower than mature economies, I would expect to see it rise over the next few years. Even so, it will remain far below that of – for example – the US, Japan, the UK or large Continental European economies.



Photo: Corbis / Anne Helletaud

If the debt burden in high-income countries does rise in this way, is it likely to lead to economic instability, and if so, in what form?

Sir John Major: This depends on market perception of the quantum of debt, as there is usually a great deal of flexibility in the size of the debt burden before serious economic instability results. However, problems arise if markets panic because the debt levels have drifted upwards and they see no credible plan is in place to reduce them.

The economic damage in such circumstances can be significant: a fear of debt default may trigger currency collapse, or a reduction in the national credit rating.

How might international relations between debtor and creditor countries (e.g. the USA and China) be affected by the rising debt?

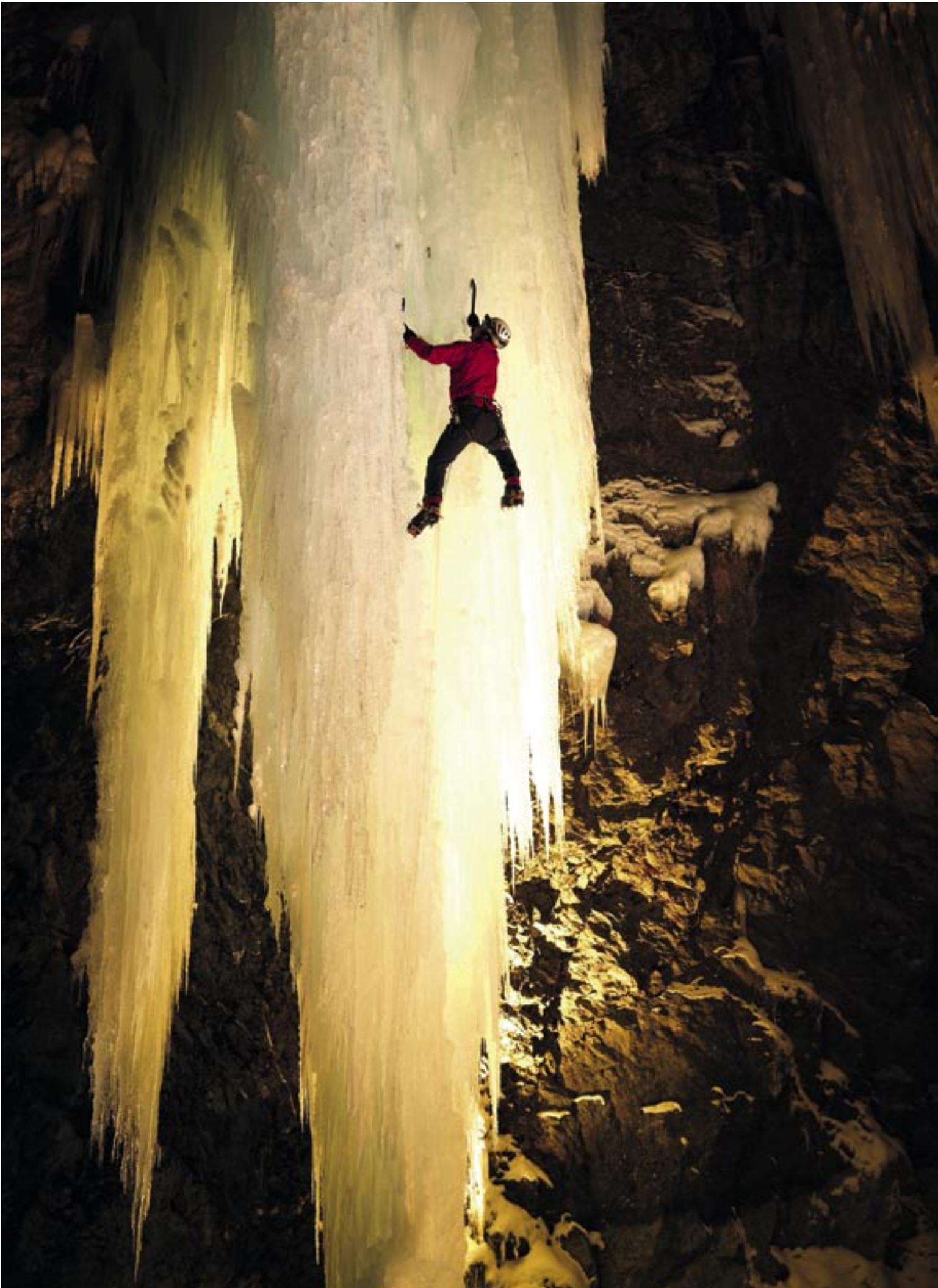
Sir John Major: To an extent, debtor and creditor nations are tied together.

In the case of the US and China there is a classic mutual interest: America is China's principal market for consumer goods and China funds a large part of the US deficit. Thus, if – for example – the US consumer went on a spending strike, or the USD collapsed in value – China's exports would fall and, no doubt, so would her levels of employment. Maintenance of the status quo is important to both nations and – undoubtedly – affects political relationships as well as economic.

How will the pressures of rising debt affect the evolution of domestic politics in the high-deficit countries?

Sir John Major: Rising debt has a malign effect on domestic policies. It's impact is widespread. It can lead to (1) cuts in government spending and/or higher taxes; (2) (probably) higher interest rates to fund the debt; (3) lower economic efficiency; and (4) in certain instances, inflation. Cherished schemes are unaffordable and public opinion (and votes) often deserts the government in favor of opposition parties. Within reason, debt can rise without great damage to an economy, but once it is perceived as being too high to be bearable, action must be taken to alleviate it and this is invariably unpalatable. ■

THE RT. HON. SIR JOHN MAJOR, KG, CH, was Prime Minister of the United Kingdom and Leader of the Conservative Party from 1990 to 1997. During his premiership, the British economy recovered from the 1990–92 recession to usher in one of the longest periods of economic growth in British history.



Will debt spur inflation?

While the immediate outlook for developed world inflation is tame, not least because the output gap indicates considerable slack in the global economy, higher debt levels are unlikely to produce an inflation surprise in the near future in our view.

Robert Barrie, Head of European Economics at Credit Suisse Investment Banking

In this article, we consider the prospect for inflation and how it might or might not be affected by higher levels of public indebtedness. For the most part, our focus is on the main industrialized economies.

The prospect for inflation is more uncertain than it has been for some time. Inflation has already become more volatile. For the past twenty years or so – a period that is sometimes called the “great moderation” – inflation has been low and stable. In the last year or two, however, it has risen by more and fallen by more than we have become used to in a number of economies. The reason for the uncertainty is that inflation is typically thought to depend on variables such as the output gap or the money supply, as well as on inflation expectations. However, these different models provide very different messages at present. Some measures of the output gap are very large, which might point to low inflation, and some measures of money growth are very strong, which might point to high inflation.

It is not even as simple as that, however. Not all measures of the output gap are very large – the gap itself is very uncertain – and some measures of money growth – those that relate to the commercial banks’ balance sheets rather than those that relate to the central banks’ balance sheets – remain very weak. Inflation expectations are mixed too. In our view, inflation is likely to remain low – and in some cases it may be very low – in the short run and to rise to some extent over the medium-to-longer run. The extent to which it rises will depend in part on monetary policy and, in particular, the success of the exit from the present very extended policy settings. Exit too early and inflation could even fall further; leave it too late, on the other hand, and it may rise too far.

In the meantime, large budget deficits and low nominal growth rates mean that public debt ratios are set to rise. There may be a concern about creditworthiness and sustainability – all the more so if we take the prospective implications of demographic change into account. Inflation may be seen as a solu-

tion. It is not, in our view. A successful exit from the present extended policy settings is needed in the fiscal policy context too. Growth rather than inflation is what is required.

The output gap

The output gap compares actual output with an estimate of its trend or potential level in an attempt to measure the pressure on capacity. Trend or potential output has to be estimated because it can’t be directly observed. The estimates are inevitably uncertain and subject to revision. It is also the case that actual output is subject to revision and sometimes by relatively large amounts. Nonetheless, despite all the difficulties, the output gap is the dominant way of thinking about inflation in the short run.

There is almost certain to be spare capacity in the main industrialized economies after the latest recession. Unemployment has risen and capacity utilization has fallen. In the USA, for example, the unemployment rate is almost 4% above a simple linear trend and industrial capacity utilization is closer to 8% below it. Interestingly, both unemployment and capacity utilization have risen further in the most recent period in the USA. However, accepting that there is spare capacity is not the same as knowing how big the output gap might be. A recent IMF study put the G-7 output gap at roughly 4% on average in 2010, with Japan and, to a lesser extent, the USA and the UK a bit higher than that, and the euro area a bit lower. The numbers may, or may not, be right – different ways of measuring the gap can produce very different results.

In the USA, for example, a simple statistical filter suggests that the output gap could be as low as 2% at the start of 2010 and a production function suggests that it could be as high as 6% (Figure 1). A further point to note here is that the global gap may be smaller than the G-7 gap. It is possible that there is no output gap at all in the emerging economies. That, in turn, may have implications for commodity prices and the relation-

Figure 1

US output gap: Different measures (%)

Source: Credit Suisse

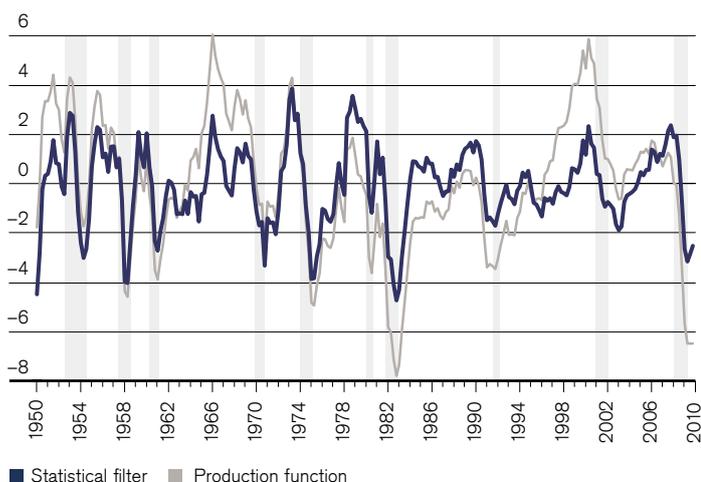
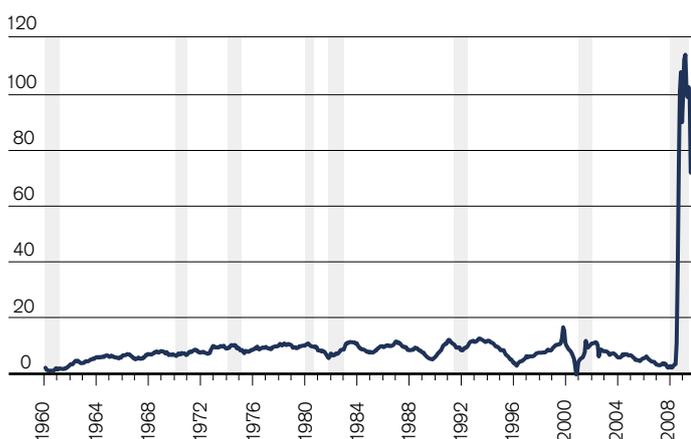


Figure 2

US monetary base growth (%)

Source: Credit Suisse



ship between headline and core inflation. We find more uncertainty when we turn to the money supply. Central bank balance sheets – the source of base or high-powered money – have in some cases doubled in size since the crisis. Meanwhile, in the wider economy, narrow money growth – as measured by an aggregate such as M1 – has risen in a number of economies, but broad money growth – as measured by an aggregate such as M2 or M3 – has slowed, as has credit growth (Figure 2).

Inflation should remain low

In our view, inflation is likely to remain low – and in some cases it may be very low – in the short run and to rise to some extent over the medium-to-longer run. In the past, core inflation has typically been lower up to three years after a recession than it has during the recession. Some illustrative simulations suggest that core inflation could fall to zero or less in the USA and the euro area over the next two to three years. This is mostly due to the output gap. To state the obvious, inflation is likely to fall by more if the gap is relatively big and if it has a relatively big effect. How should we think about money growth in this context? It is possible that, in the short run, it does not matter very much or, more likely, perhaps the way it does so is through spending and the output gap. If this is right, then money may not add much to a forecast or a simulation that is based on the output gap.

It is also possible that, in the short run, money growth shows up in asset prices more than in spending and/or that it has an effect on inflation expectations. However, the combination of low and falling goods and service price inflation, with high and rising asset price inflation could be awkward from a policy point of view. It could also be awkward if actual inflation were to be low and falling, but inflation expectations were to be high and rising. The conclusion we draw is that money growth may have an effect, but that there should be time to reverse its recent expansion, or to offset it, before it becomes too problematic. In a technical sense, it is possible to reverse the expansion in the central banks' balance sheets at almost any time. The authorities have already set out how they might do it – though not when. The evidence suggests that any relationship between money and inflation applies over the medium-to-longer run and is strongest in the case of broad rather than base or high-powered money (Figure 3 & 4).

How could we be wrong on inflation? The main upside risk is if the output gap is smaller or has a smaller effect than we have assumed. The recovery could be stronger or, more likely, the recession may perhaps have led to a one-off loss in potential output or a reduction in potential growth. It is that sort of thing that tends to lead to the smaller output gap estimates. We have already noted the possibility that the smaller global output gap may be relevant to headline inflation. Of course, another risk is that, as my colleagues Andrew Garthwaite and Michael O'Sullivan point out in the first article, finance ministers may try to engineer inflation.

However, assuming low inflation, the main downside risk here is that a period of low inflation leads to a fall in inflation expectations. If that were to happen, real interest rates – nominal rates minus expectations – would tend to rise, which would likely weaken the recovery and cause inflation and possibly inflation expectations to be even lower. The risk of that sort of downward

spiral was very real when the crisis started and policy moved very quickly and very decisively to address it. It has become less of a risk, in our view, in the light of the recovery.

Indebtedness

For all the talk about inflation, nominal growth has recently been negative in a number of economies and may remain low for some time. The short run issue for monetary policy has been the zero bound on rates. The response has been to reiterate inflation targets and make use of a range of unconventional measures. For fiscal policy, however, the combination of large budget deficits and low nominal growth means that public debt ratios have started to rise and are set to rise further. In some cases, they look set to rise very sharply.

The arithmetic here is that the future debt ratio depends on the current debt ratio multiplied by the gap between the relevant interest rate and the growth rate – which measures the extent to which the ratio is likely to rise in the absence of new non-interest borrowing – as well as the primary deficit (the deficit minus debt interest) – which measures the extent to which the ratio is likely to rise because of new non-interest borrowing. Both components of the equation became very unfavorable during the crisis.

It is possible that some will see inflation as a solution to the rise in indebtedness (provided, of course, that policymakers do not engineer inflation as a response to debt), although this is not likely, in our view. Any rise in inflation that is expected to persist is also likely to raise the relevant interest rate by at least as much as it raises the relevant growth rate. It is also the case that many public spending programs are indexed. The extent that higher inflation changes the debt arithmetic could make it worse. Interestingly, and contrary to some expectations, we find that there has been hardly any relationship between levels and changes in public debt and inflation in the past.

More generally, the solution is to raise growth, keep interest rates low – which is likely to mean a credible commitment to low inflation – and, as soon as it is possible to do so, to make the appropriate reductions in the deficit. As a practical matter, the initial emphasis is likely to be on growth. The recovery should improve both components of the debt ratio equation – the gap between the relevant interest rate and the growth rate, as well as the primary deficit. The latter should improve because the automatic stabilizers – those parts of the tax and spending system that are sensitive to the cycle – should start to work in a more favorable way and because stronger growth is likely to make discretionary tightening measures a more practical proposition.

The only problem with this strategy is that it too may not be completely credible – initially at least, it may look as if the authorities are doing very little and simply hoping for the best. For that reason, markets may require some confirmatory measures earlier than the authorities might otherwise introduce them and that might, in turn, make growth slightly slower than otherwise. Hence it is unlikely to be completely straightforward in practice, but it nonetheless remains the best strategy.

It is worth adding that growth may also help minimize the cost of some of the off-balance sheet guarantees and other interventions that the public authorities have made during the crisis. These tend not to appear in the regular debt ratio and deficit numbers because of their contingent nature, but they do in some cases represent very large commitments. ■

Figure 3

Base money and CPI inflation: 2-year average growth rates (%)

Source: Credit Suisse

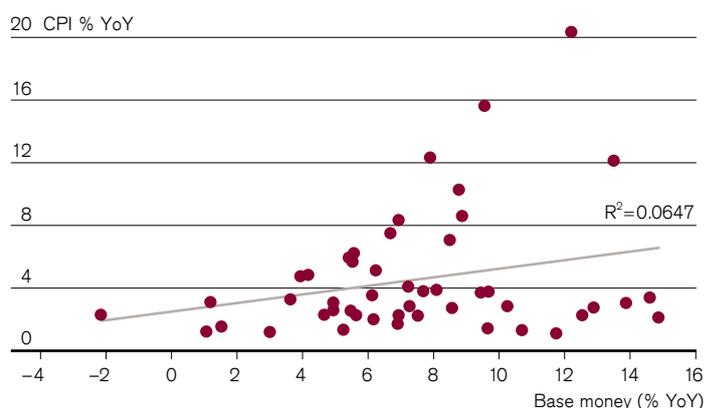
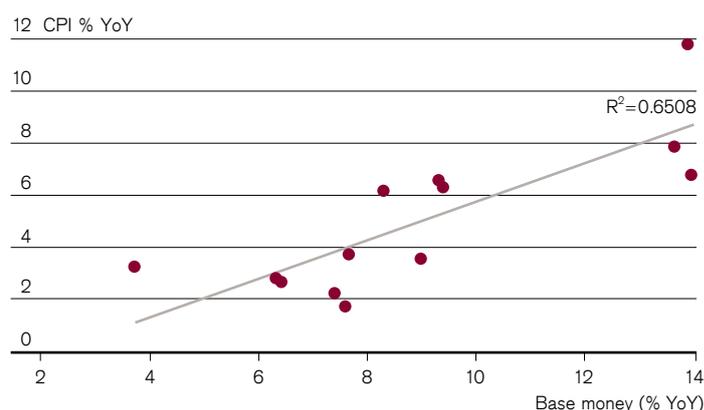


Figure 4

Broad money and CPI inflation: 10-year average growth rates (%)

Source: Credit Suisse





Emerging from indebtedness

Since the Asian financial crisis in 1997, there has been a qualitative change in the balance sheets of “emerging” countries, such that many of them now have low debt to GDP ratios by comparison to the developed world. Through the credit crisis, the distinction between public finances in the emerging market and developed worlds has been manifest in credit default swap spreads, a trend we expect to persist.

Bunt Ghosh, Vice Chairman, Fixed Income, Asia, at Credit Suisse Investment Banking

Paul Fage, Head of EMEA Strategy at Credit Suisse Investment Banking

Kasper Bartholdy, Head of Strategy and Economics at Credit Suisse Investment Banking

Fiscal crises, defaults and high inflation are traditionally considered to be preserve of emerging markets and historically this has been deserved. Yet the Asian crisis of 1997 provoked a major policy shift, which has allowed many emerging markets to weather subsequent crises, in both emerging and G-10 countries, with surprising equanimity.

The 1997 crisis brought about three fundamental changes in policy: (1) an extremely conservative fiscal stance, promoted by the IMF, which saw many countries run significant primary surpluses; (2) a policy of managing exchange rates to prevent sustained periods of over-valuation, and (3) an increasing reliance on local rather than external debt.

The consequence of these policies was that, for the first time, many emerging markets were able to carry out counter-cyclical monetary and fiscal policies that helped mitigate much of the impact of the crisis.

However, there is a more important consideration that has begun to affect the consciousness of investors. On page 13, Amlan Roy looks at the unfunded pension and health liabilities that the developed economies face. It is estimated that, across the EU, social security and healthcare benefits in 2007

equated to 23% of GDP and will grow by a further 4.7% between 2007 and 2060. More specifically, and under the same assumptions, the costs for the twelve “new” members of the EU amount to 14.4% of GDP and should grow by 4.1% between 2007 and 2060. Most emerging markets, by virtue of their younger population as well as their less developed social security and pension systems, have far smaller long-term unfunded liabilities on their balance sheets and therefore face far less in the way of fiscal adjustment pressures relative to industrialized nations.

This structural advantage should result in many (but not all) emerging markets being more able to deal with both cyclical as well as exogenous shocks far more effectively than industrialized countries.

Public finances in emerging markets

Up until the credit crunch, the finances of most emerging market (EM) governments had been on an improving trend that started in the early 2000s. By 2007, EM governments were on average running a small fiscal surplus, having run large deficits at the time of the 1997 and 1998 EM crises. Debt-to-GDP

Figure 1

Change in debt-to-GDP ratios

percentage points

Source: IMF

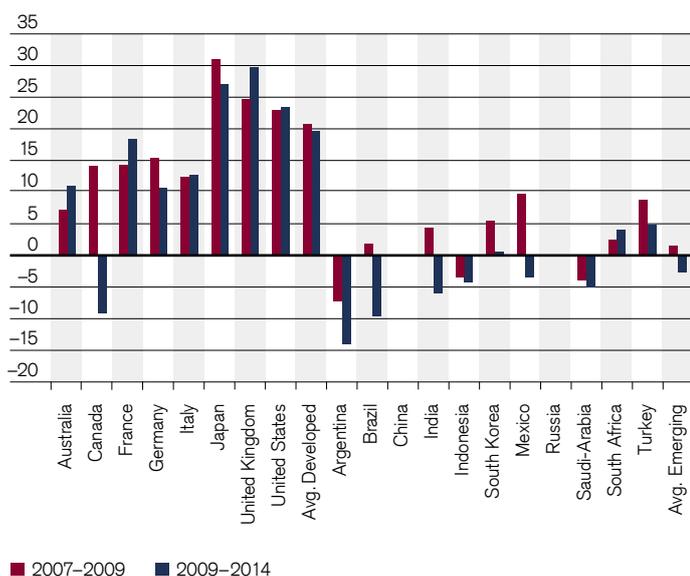
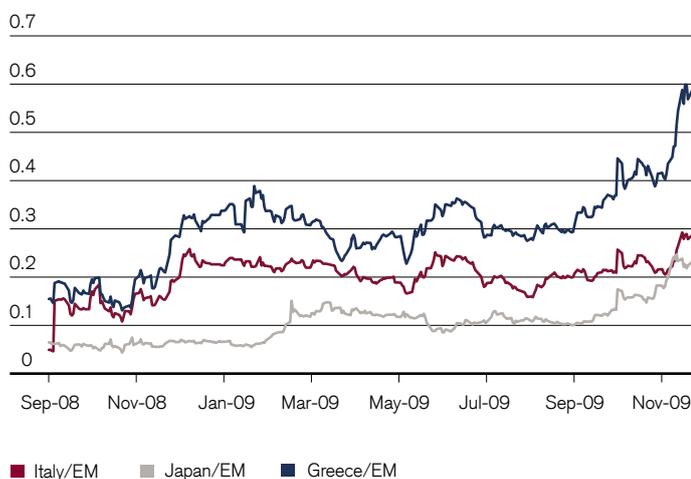


Figure 2

Ratio of Greece, Italy and Japan CDS to EM CDX Index

Ratio of 5-year sovereign CDS to 5-year OTR EM CDX index

Source: Credit Suisse



ratios have been on a downward trend, particularly in the EMEA region, mainly due to the improvement in government finances in Russia and Turkey.

Prior to the credit crunch, there was a view gaining some currency that the EM economies, partly due to the growing economic importance of China, were becoming decoupled from the USA. The fact that, from around 2005 to 2007, EM growth was accelerating while US growth was decelerating gave credence to this view. In fact growth in the EM countries turned downwards following the collapse of Lehman Brothers almost simultaneously with the US economy. The recovery of the EM and US economies has also been virtually simultaneous.

In hindsight, it is unreasonable to have expected the EM economies to decouple from the USA in the event of a major downturn. However, the performance of the EM economies during the credit crunch was encouraging in a number of respects. The build-up of FX reserves and the strength of the fiscal position in many EM countries did help dampen the magnitude of the crisis in 2008. The extreme outcome – sovereign default – was avoided, except in the case of Ecuador¹. In past economic crises, it has often been the case that EM countries have had to pursue pro-cyclical monetary and fiscal policies in order to stop their currencies collapsing. During the recent crisis, however, some of the EM countries, especially China, have been able to use aggressive counter-cyclical policies to help pull themselves out of the slowdown/recession. While some EM currencies have weakened, there have been no full-blown currency crises.

So a “mild version” of the de-coupling story still seems largely right: the EM world may grow steadily even if the G-3 world is growing sluggishly. But it remains unrealistic to think we can have a major crash in G-3 without a crash in EM.

As a result of the credit crunch, the fiscal balances of EM governments have on average moved to a deficit and there will be a small rise in the average debt-to-GDP ratio by the end of this year. However, EM sovereigns have performed relatively well during the credit crunch compared to most G-10 sovereigns. This largely reflects the fact that most EM banking systems, with some notable exceptions, mainly in Eastern Europe, have not had any major problems, and hence have not required the large-scale government bailouts seen in many developed countries.

In Figure 1, we show the change in debt-to-GDP ratios from end-2007 to end-2009 and from end-2009 to end-2014 based on IMF forecasts² for the individual countries making up the G-20. The Figure clearly shows that, in terms of government indebtedness, the emerging economies have performed much better than their developed counterparts. On a GDP purchasing power parity (PPP)-weighted basis, the debt-to-GDP ratio is expected to increase by just 1.5 percentage points on average between end-2007 and end-2009 for the emerging countries, while it is expected to increase by 20.7 percentage points for the developed countries. Furthermore, based on IMF forecasts, emerging countries will continue to have better debt

¹ The default by Ecuador in 2008 on two of its three outstanding Eurobonds was largely political and not driven by dire economic circumstances.

² “The State of Public Finances Cross-Country Fiscal Monitor: November 2009”, Fiscal Affairs Department, IMF.

dynamics than the developed countries for a number of years from now. The weighted average forecast change in the debt-to-GDP ratio for the emerging countries between end-2009 and end-2010 is -2.7 percentage points, while for the developed countries it is $+19.5$ percentage points.

The better past performance and expected better future performance of the EM sovereigns relative to the developed sovereigns in terms of debt ratios has, unsurprisingly, led to an outperformance of the credit default swap (CDS) spreads of EM sovereigns versus developed sovereigns. This has been particularly noticeable for developed sovereigns with high debt-to-GDP ratios. In Figure 2, we show the ratio of the 5-year CDS spreads for Greece, Italy and Japan to an emerging market sovereign CDS index, i.e. the OTR 5-year EM CDX index (we look at ratios to allow for the fact that, as the level of spreads increases, the spread volatility in basis points increases.)

Since the collapse of Lehman Brothers, there has been a trend underperformance of the spreads of these sovereigns versus the EM CDX index. Interestingly there has been a sharp underperformance of these credits in recent weeks. In the case of Greece, it is as a result of the sharp upward revision by the new socialist government of the forecast fiscal deficit for this year to 12.7% of GDP. There has also been a lot of focus on the high debt-to-GDP ratio of Japan, forecast to be 218.6% at the end of this year by the IMF.

The decision as to which countries should be classified as emerging and which as developed has always had an arbitrary aspect, particularly when it came to the better-rated “emerging” sovereign credits. However, in the past there has usually been a reasonable distinction in terms of credit spreads, with nearly all the sovereigns generally considered as “developed” trading on significantly lower spreads than those considered to be “emerging.” In the wake of the credit crunch, the dividing line between developed and emerging sovereign credit spreads is now not nearly as sharp. There are now developed sovereigns such as Ireland and Greece whose CDS spreads are higher than many emerging sovereigns (Figure 3). Japan 5-year CDS at around 70 basis points is not far off China CDS at around 80 basis points.

It is hard to escape the conclusion that this blurring of the distinction between credits traditionally thought of as “emerging” and those as “developed” will continue. There has been a gradual improvement in the average ratings of EM countries from around 2002 (Figure 4), the recent small weakening being largely due to downgrades in Eastern Europe. We expect this improving trend in ratings to continue. Most EM countries have been following more prudent fiscal and monetary policies in recent years. The demonstrable success of these policies during the credit crunch helps win over public support for maintaining these policies going forward. On the other hand, the ratings of many developed countries are under pressure right now and it is far from clear whether they will be able to avoid downgrades. In the longer term, the adverse demographics are a major challenge to the governments in most developed countries, and unless entitlements are cut, which is politically difficult to do, a downward trend in ratings is almost inevitable. ■

Figure 3

5-year sovereign CDS rates

5Y CDS rate, mid, basis points (as of 2 December 2009)

Source: Credit Suisse

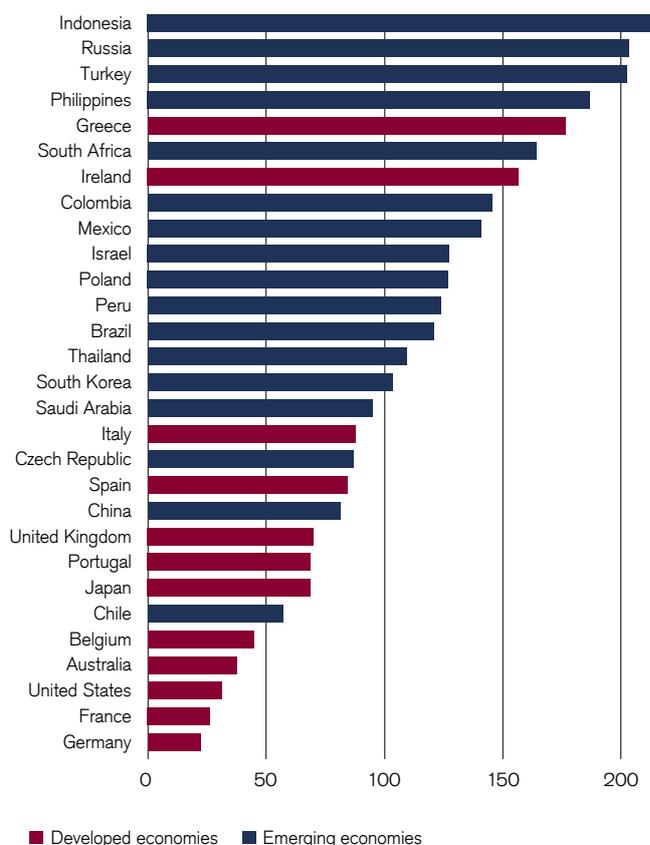
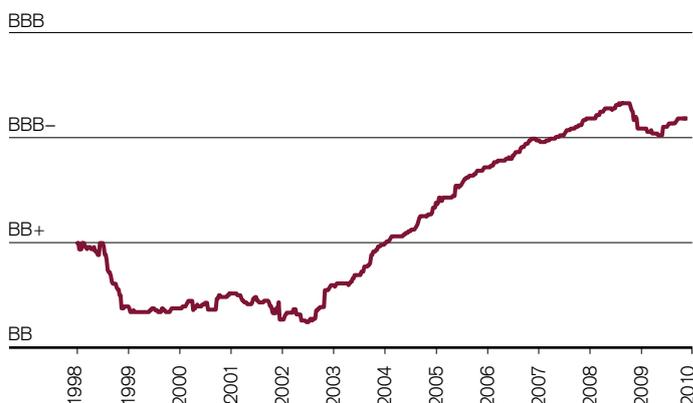


Figure 4

Average rating of a group of EM sovereigns

Unweighted average of the mean of S&P and Moody's ratings for a group of 31 emerging market countries

Source: Credit Suisse



Policy challenges in a debt-laden world

Dr. Ernesto Zedillo considers the challenges of a new world where record debt levels form the backdrop to tackling high unemployment and slow growth.

Research Institute: IMF projections show rapidly rising government debt in high-income countries. Is this likely to happen?

Dr. Ernesto Zedillo: Actually it is not only likely, but certain that most of the G-20 advanced countries' public debt will grow rapidly for a number of years. Whether it will happen to the extent now projected by the IMF (government debts of those countries reaching on average almost 120% of GDP by 2014) is another question. Among other unknowns, it is not yet possible to estimate with reasonable accuracy the net fiscal impact of the support provided to financial institutions and the damage caused on the fiscal accounts by the post-crisis weaker economies. The debt trajectory may not prove as bad as the IMF projections currently suggest, but even with favorable economic tailwinds, it will still not be much better.

The same projections suggest many emerging market countries having much lower debt. Is this plausible?

Dr. Ernesto Zedillo: In general, emerging countries managed to improve their public finances during the pre-crisis boom, their financial systems have not required massive support during the crisis and, with some exceptions, their countercyclical interventions have been limited. Therefore, it should not be surprising that, overall, their debt-to-GDP ratios will look better than the corresponding ratios of advanced countries. Yet, average ratios can give a misleading picture. There are significant differences among emerging countries, depending on their respective domestic savings rates and structural fiscal positions. For example, in the absence of corrective policies, the debt-to-GDP ratios of countries like Brazil and India could soon reach worrisome levels. The yellow lights will be on for emerging



Photo: Keystone / Remy Sienegger

countries like Mexico and Brazil with savings rates that are too low for their economic growth needs and aspirations. In contrast, China and other emerging Asian countries will continue to have strong debt stances given their extremely high savings rates and strong fiscal positions.

If the debt burden in high-income countries does rise in this way, is it likely to lead to economic instability, and if so, in what form?

Dr. Ernesto Zedillo: The high debt scenarios are not sustainable in the long term. Their deterioration beyond certain levels will be prevented either ex-ante by sound corrective policies or ex-post by the brute force of new financial and fiscal crises stemming from high interest rates and inflation. The latter form of disorderly adjustment would be more onerous than the former.

How might international relations between debtor and creditor countries (e.g. the US and China) be affected by rising debt?

Dr. Ernesto Zedillo: Failure to prevent the re-emergence of substantial global macroeconomic imbalances,

which is what will happen in the absence of corrective and coordinated adjustment policies among the key economies, would give rise to geopolitical tensions that will end up eroding all other aspects of international cooperation and thus putting at risk the progression of globalization. The need of policy coordination is not only about the US and China. There are other important deficit and surplus countries and there are others that, notwithstanding their negligible contribution to the global imbalances, have already been affected and would continue to be severely impacted if acute imbalances re-emerge. Consequently, policy coordination, multilaterally sanctioned, among the G-20 members makes a lot of sense. Of course, the roles of the US and China in that endeavor will prove crucial.

How will the pressures of rising debt affect the evolution of domestic politics in the high-deficit countries?

Dr. Ernesto Zedillo: High unemployment, caused by the crisis and due to persist for some time even after the recession is firmly over, will be a chief driver of the domestic politics in each deficit country and will make it very hard to undertake the fiscal adjustment and policy coordination necessary to prevent a debt explosion and restore sustainable economic growth. This means that the real challenge is more about domestic politics pushing in the direction of rising debt and not the other way around. ■

FORMER PRESIDENT OF MEXICO, DR. ERNESTO ZEDILLO is the Director of the Yale Center for the Study of Globalization and professor in the field of international economics and politics at Yale University. He is recognized as a leading voice on globalization, especially its impact on relations between developed and developing nations.

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