

The Super-Cycle Report Investor Supplement

Turning Insights into Asset Allocation Strategy





Executive Summary

The world that our children will inherit may have some similarities to the one we remember from our youths but in many ways it will be vastly different. For better or worse, we have already witnessed many of these changes: increasing economic inter-connectivity, urbanisation and technological innovation.

Still there is still a tremendous gap between richer industrial nations and younger emerging nations. Standard Chartered believes this gap is closing for the better. This will represent one of the most important paradigm shifts in investing for the next 20 years. Last year, Standard Chartered Global Research laid out this vision of the future in the highly lauded "**The Super-Cycle Report**"¹.

"Super-Cycle" refers to a period of high growth lasting more than a generation that can be driven by trade, investment, demographic and technological change. We foresee the **epicenter of this new Super-Cycle to be in Emerging Markets with the economies of China and India the key engines** of this long term secular growth. We see **China expanding from 11% of the world's GDP to 34% by 2030** and **India more than quadrupling over the same period**.

Bridging this wealth gap will have tremendous benefits for millions if not billions of people, but what are the implications to investing and how do you position yourself to participate in the Super-Cycle?

In this Investor Supplement to the report, we discuss trends, implications and propose the following:

Emerging market equities should have a higher weighting in portfolios

While we do not expect emerging markets to be less volatile, we do feel that returns are likely to be more attractive to compensate for the level of risk. We expect these markets to demonstrate sustainable real GDP growth of 6.5% per annum as well as steady currency appreciation. While there is a measure of dilution as GDP growth flows through to equity earnings, EM Equity should present an attractive opportunity on a risk adjusted return basis.

Emerging market debt and currency may become a less volatile core asset class

By 2030, EM debt will be a core fixed-income asset class representing a third of the global debt market (forecast from 11% today). We expect significant issuance of local currency government and corporate debt. Higher yields, improving fundamentals and appreciating currencies make this asset class appealing. Further, what was once considered a risky non-investment grade asset class should demonstrate an improving risk-profile. Today, 56% of the EM Bond Index Global (EMBIG) is already rated investment grade.

Commodities still a great long-term diversifier but we expect high volatility

Despite some short term positive correlation to equities, we find strong evidence of uncorrelated returns on a long term basis and good diversification effects from investing in commodities. While increased demand from emerging economies should provide price support for commodities, we are cognisant of the fundamentally volatile asset class. So our allocation to commodities is a bit lower with a view to tactically allocate when opportunities arise.

¹ Standard Chartered Bank, *The Super-Cycle Report*, November 2010



Implications in Practice



In summary, our recommended asset allocation for a Moderate Investor is as follows:

Standard Chartered Bank, Group Wealth Management

Based on the three key trends discussed earlier, we highlight the following changes to our "Moderate" strategic asset allocation between 2010 and 2011 below:

Asset Class	2010 Allocation	2011 Allocation
EM Equity(including Asia)	20%	23%
EM Debt	10%	15%
Commodity	5%	10%



Chart 1.2: Change in Strategic Asset Allocation,

Source: Standard Chartered Bank, Group Wealth Management



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1.0 Overview

In November 2010, Standard Chartered Bank ("SCB") published The Super-Cycle Report. The report outlined SCB's long term view on economic and financial market evolution and growth prospects for both developed and emerging economies. In light of the super-cycle forecasts, this report clarifies our thinking on strategic asset allocation. It explores the impact of super-cycle factors on risk and return characteristics of major asset classes (equity, fixed income, and commodities). Finally, it presents proposed strategic asset allocation weights for a balanced portfolio.

1.1 The Super-Cycle

The Super-Cycle Report postulates the world is in the midst of a third super-cycle; a period of high growth driven by increasing trade, high rates of investment, urbanisation, and technological innovation, characterised by the emergence of large, new economies.



Chart 2: Super-Cycles – world GDP growth

The report projects the size of the world economy at USD 308trn in nominal terms by 2030. This represents an annual average nominal growth rate of 7.7% from 2000, and of 8.3% from 2010. A large portion of this growth is driven by emerging economies. For example, China's growth rate in real terms is forecast at 9.3% (2011) and 10.0% (2012), averaging 6.9% over the two decades to 2030. For India, the growth figures are 8.1% (2011) and 8.8% (2012), averaging 9.3% over the forecast horizon. While Developed Markets (DM) represented 60% of the global economy in 2010, its share should shrink to only 29% by 2030. China, on the other hand, should see its share increase from 9% to 24% of nominal global GDP in twenty years.







Sources: IMF, Standard Chartered Research

Sources: IMF, Standard Chartered Research

As part of our analysis, we explore the impact of forecast growth in EM on each of the major asset classes.

Source: Angus Maddison, IMF, Standard Chartered Research



2.0 Equities

As economies develop, there is a corresponding expansion of financial markets, and a potential impact on asset returns. The Super-Cycle Report estimates global equity market capitalisation will rise from USD 51 trillion in 2010 to USD 322 trillion in 2030. A large portion of this growth is driven by emerging economies where higher per-capita income and rising productivity should support a deepening of capital markets. The market capitalisation for Asia ex-Japan is projected to expand to USD 151 trillion (15% CAGR) by 2030 with China expanding from a base of USD 4 trillion today to USD 80 trillion (16% CAGR). Given these forecasts of capital market expansion, we explore their impact on equity returns.

2.1 Components of Equity Return

A key question for investors is whether forecasts of superior growth will translate into actual stock returns. We decompose equity return into basic components and evaluate each one to better understand the relationship between GDP growth and stock returns:

Nominal Expected Return =

- Expected Inflation
- + Dividend Yield
- + Changes in the P/E level (Valuation)
- + Currency Changes
- + Expected Real Earnings Growth

2.1.1 Expected Inflation

We assume an inflation rate of 2.1% for DM Equity and 4.0% for EM Equity for the period 2010-2030. For EM, one might associate rapid growth of the super-cycle with increased inflation levels. Inflationary pressures have been building, as captured in the recent headline rate of inflation. Energy and food prices have been key drivers of this increase. However, on a long term basis, we expect central banks for key EM countries will strike an appropriate balance between policy measures to temper inflation and sustainable growth. We address in detail the topic of inflation in a later section on Risks.





Chart 5: G7 Inflation Rate 1995-2010 (annual percent change)

Source:International Monetary Fund



Chart 6: EM & Developing Economies Inflation Rate 1995-2010 (annual percent change)



2.1.2 Dividend Yield

For DM Equity, our assumption for long run dividend yield is 2.7%, based on a payout ratio of 45% and an assumed earnings yield of 5.9%. For EM Equity, our assumption is 2.2%, based on a payout ratio of 35% and an assumed earnings yield of 6.5%. Our earnings yield estimates are derived based on long run P/E of 17 for DM and 15.5 for EM. The forecasts for dividend yield are roughly in line with historical averages. However, dividend policy can also be influenced by changes in the tax regime. For instance, given the double taxation of dividends in the US, it is more efficient for companies to distribute earnings via buybacks (which are taxed at the capital gains rate).

2.1.3 Changes in Valuation

Fundamentally, if valuations remain unchanged, stock returns should mirror EPS growth. However, history has shown changes in valuation can have a significant impact on equity return. MSCI Barra² analyses long run valuation growth for the MSCI World Index. The analysis uses Price/Book (P/B) instead of Price/Earnings as P/E analysis would be meaningless in periods of negative earnings.

Table 1: Decomposition of gross returns for MSCI World Index (1975-2009)

Period	1975 – 2009	1975 – 1979	1980 – 1989	1990 – 1999	2000 – 2009	Volatility 1975 – 2009
Gross Index Return	11.1%	16.0%	19.9%	12.0%	-0.2%	14.9%
Inflation (USD)	4.2%	8.1%	5.1%	2.9%	2.6%	1.3%
Price to Book Growth	1.5%	2.3%	8.0%	5.0%	-8.3%	14.0%
Real Book Value Growth	2.1%	0.2%	2.1%	1.4%	3.8%	5.6%
Dividend Income	2.9%	4.6%	3.6%	2.1%	2.2%	0.4%
Residual Interactions	0.4%	0.7%	1.2%	0.5%	-0.5%	0.3%

Source: MSCI Barra, IMF, Bloomberg

While the long run change in price to book (valuation) growth (1.5%) has been fairly small over the analysis horizon, the associated volatility (14.0%) has been extremely high. The sub-period analysis over the past 35 years shows starting valuations play a major role in equity return. During the 1980-1989 period, the valuation multiple contributed 8.0% to gross index return. However, during the 2000-2009 period, the multiple contributed -8.3% overshadowing the return generated by dividend income and book value growth.

We extend the MSCI analysis to EM data (with the handicap of limited history). We explore valuation changes over the period 1999 to 2010.

² MSCI Barra, What Drives Long-Term Equity Returns?, January 2010



	EM Asia	China	India	Korea	Brazil	USA	EMU
Gross Index Return	11.9%	9.6%	20.0%	15.7%	22.3%	1.8%	2.0%
Inflation	3.4%	1.7%	6.1%	2.9%	6.6%	2.5%	2.0%
Price to Book Growth	3.8%	11.4%	4.9%	4.9%	11.3%	-6.7%	-7.0%
Real Book Value Growth	2.9%	-5.4%	6.9%	5.7%	-1.3%	4.2%	6.0%
Dividend Income	2.1%	2.1%	1.4%	1.4%	3.7%	1.8%	1.8%
Residual	-0.3%	-0.2%	0.7%	0.8%	2.0%	0.1%	-0.8%
Volatility of P/B Growth	31.6%	92.9%	44.2%	34.5%	47.7%	19.4%	25.6%

Table 2: Decomposition of gross returns for select EM Markets (1999-2010)

Source: MSCI Barra, IMF, Bloomberg

As with DM, we observe a high level of volatility in price to book growth for EM. Admittedly, the short time series prevents us from assuming these volatility levels are long run averages. However, the elevated levels of volatility lead us to exclude valuation changes as a variable in calculating strategic equity return. Instead, we incorporate expected changes in valuation into our tactical asset allocation process.

While most EM have demonstrated strong earnings growth, China and Brazil displayed negative to very low returns from this variable. While not directly connected to the subject of valuation, this observation is worth exploring further. Given China is central to our super-cycle theme, we would expect to see strong earnings growth rather than valuation driven return. A possible reason is the time-frame we have used for analysis. China earnings growth was slower to recover from the Asian Crisis that some of its counterparts in the region. Investors also penalised emerging markets such as Brazil on the back of the Asian crisis in 1997 and the Russian debt crisis in 1998. Additionally, Brazil's 'Plano Real' to stabilise the economy began to take effect in the latter half of the 1990s. We explore this hypothesis by shifting our window of analysis to the 2002-2010 period.

Table 3: Decomposition of gross returns for EM Asia, China, and Brazil

	EM Asia (1999-2010)	EM Asia (2002-2010)	China (1999-2010)	China (2002-2010)	Brazil (1999-2010)	Brazil (2002-2010)
Gross Index Return	11.9%	14.6%	9.6%	19.6%	25.5%	23.0%
Inflation	3.4%	3.7%	1.7%	2.3%	6.6%	6.7%
Price to Book Growth	3.8%	3.1%	11.4%	3.3%	11.3%	6.0%
Real Book Value Growth	2.9%	6.2%	-5.4%	11.6%	1.7%	4.9%
Dividend Income	2.1%	2.3%	2.1%	2.2%	3.7%	3.6%
Residual	-0.3%	-0.7%	-0.2%	0.2%	2.3%	1.7%
Volatility of P/B Growth	31.6%	31.7%	92.9%	43.2%	47.7%	33.6%

Source: MSCI Barra, IMF, Bloomberg

A comparison of data over the two periods provides a more comforting picture of earnings driven growth. From 2002-2010, China, Brazil, and the EM Asia index all demonstrate strong returns from earnings growth and a much lower contribution from valuation changes. Additionally, while the volatility of valuation changes from 2002-2010 is high on an absolute basis, it's much lower than the 1999-2010 timeframe. While it's hard to pinpoint the exact starting date of a super-cycle, the earnings momentum in EM displayed in Tables 2 & 3 strongly supports the growth trend.



2.1.4 FX Changes

The role of the USD is likely to wane over the super-cycle. Given the challenges around reflation of the US economy and a lower growth trajectory, we believe the USD is in a choppy multi-decade downtrend. However, while the USD may not be far from fair value versus several key G10 currencies such as the EUR and the Japanese yen (JPY), several EM currencies, especially in Asia ex-Japan (AXJ), are substantially undervalued. Hence, over the coming 20 years, we expect substantial appreciation in key AXJ currencies, in line with our view that economic and financial power will gradually shift from West to East.

We forecast the CNY will be the best-performing EM currency through 2030. This is supported by China's large external surpluses, solid international investment position, high productivity growth and our expectation of relatively low CPI inflation throughout the period. In addition, we believe the CNY will be a major reserve currency by 2030. This may provide long-term support for the CNY, as it has done for the EUR since its creation in 1999.

We also expect the KRW, INR and IDR to appreciate substantially versus the USD, especially over the coming 5-10 years. During that period, we forecast the KRW will be among the best-performing Asian currencies, as it is now among the most undervalued currencies in the region. However, given the maturity of the Korean economy, KRW appreciation is likely to slow sharply starting in the middle of the decade. Our expectation of long-term INR and IDR appreciation is supported by our projection that India and Indonesia will be the fastest-growing major EM economies through 2030. This should be accompanied by rapid productivity growth.

2.1.5 Expected Real Earnings Growth

A basic proxy for real earnings growth would be real forecast GDP growth. We analyse in detail the relationship between GDP growth and earnings growth. In theory, an expanding economy should benefit corporate profits which, in turn, will impact earnings per share (EPS) growth.

GDP Growth -> Corporate Profit -> Earnings Per Share (EPS) Growth

As a start, we review GDP growth projected by the Super-Cycle Report.

Developed Markets	GDP Growth (%)	% of Total GDP (2030)	Asia ex- Japan	GDP Growth (%)	% of Total GDP (2030)	Other Emerging Mkts.	GDP Growth (%)	% of Total GDP (2030)
United States	2.50	14%	China	6.90	22%	MENA	5	5%
Europe	2.50	15%	India	9.30	9%	Latin America	4.5	9%
Japan	1.00	2%	Rest of Asia	5.20	10%	Russia/CIS	4.9	4%

Table 4: Super-Cycle (2000-2030) trend growth forecasts (Real GDP Growth),

Source: Standard Chartered Global Research

From an asset class perspective, we divide the equity universe into two strategic areas: DM Equity and EM Equity. Based on data in Table 3 and a simple weighted average methodology, we adopt a 6.5% real GDP growth forecast for EM and a 2.5% growth forecast for DM as our strategic assumptions. Within EM, we are forecasting 7% GDP growth for Asia ex-Japan (primarily driven by China and India) and a 4.75% growth rate for Other EM.



Historical GDP data (Chart 7) shows an upward trend in EM economic growth since the beginning of the current super-cycle. While the global economy was derailed by the financial crisis in 2008, we believe the long term growth trend is intact.



Source: International Monetary Fund

2.1.5.1 GDP Growth and Corporate Profits

Having made our assumption about GDP growth, we explore its relationship with corporate profits as the first part of the transfer process between GDP and earnings. Using long-run historical data, we find that except for two years (1932 and 1933) of the Great Depression when they were negative, the trend growth in corporate profits has been nearly identical to GDP between the years 1929 and 2010.





Chart 8: Nominal US GDP and Corporate Profits (1929-2010)

* Negative corporate profits in 1932 and 1933 have been excluded from the log scale representation Source: Bureau of Economic Analysis

Given the close relationship between GDP and corporate profits, an easy conclusion would be to assume EPS growth mirrors GDP growth. However, this holds true only if no net new shares are issued in the market. GDP growth is partly driven by the creation of new enterprise which does not benefit shareholders of existing listed enterprise. This "dilution effect" of existing shareholders drives a wedge between aggregate earnings and earnings per share.

A study³ by Bernstein and Arnott estimated the long-run dilution effect between real GDP growth and EPS growth to be around 2%. A related study by MSCI Barra⁴ compares GDP and earnings growth for DM countries over the past 40 years. The analysis concluded mean "slippage" between real GDP growth and EPS growth was 2.3%. This result is similar to the related Bernstein/Arnott study. While the long run average dilution hovers around two percent, this result varies at the individual country level. Sweden's EPS growth rate actually exceeded GDP by 2.30% while Belgium's EPS growth fell short of GDP by 5.3%. Some of these differences can be explained by structural differences such as openness of the economy and disparities in the proportion of listed companies. Additionally, in an era of globalisation, multinational firms have production processes located overseas. This contributes to a distinction between firm performance and country GDP growth.

³ Bernstein, William J. and Arnott, Robert D., *Earnings Growth: The Two Percent Dilution*, Sept. 2003

⁴ MSCI Barra, Is There a Link Between GDP Growth and Equity Returns, May 2010



Table 5: Real GDP, EPS, Price Growth, P/E Growth for select countries (1969-2009)

					GDP growth	GDP Growth
1060 2000	Real GDP Growth Pates	Real Stock	Real EPS	PE Change	minus Stock	minus EPS
1909-2009	GIOWIII Kales	FIICE Return	GIOWIII Kales	FE Glialiye	FIICE Return	Glowin
Australia	3.10%	0.00%	0.50%	-0.40%	3.10%	2.70%
Norway	3.00%	2.70%	0.90%	1.80%	0.30%	2.10%
Spain	3.00%	-1.40%	n.a.	n.a.	4.50%	n.a.
Canada	2.90%	2.50%	1.30%	1.10%	0.40%	1.60%
United States	2.80%	1.60%	0.00%	1.60%	1.20%	2.80%
Japan	2.80%	1.50%	not meaningful	not meaningful	1.30%	n.a.
Austria	2.60%	0.60%	-1.90%	2.60%	1.90%	4.60%
Netherlands	2.40%	1.90%	-2.60%	4.60%	0.50%	5.10%
France	2.30%	1.70%	n.a.	n.a.	0.60%	n.a.
Belgium	2.30%	0.60%	-2.80%	3.50%	1.70%	5.30%
United Kingdom	2.20%	1.10%	1.60%	-0.60%	1.10%	0.50%
Sweden	2.10%	5.80%	4.40%	1.30%	-3.50%	-2.30%
Italy	2.00%	-1.70%	n.a.	n.a.	3.80%	n.a.
Germany	1.80%	1.60%	-1.10%	2.70%	0.30%	2.90%
Denmark	1.70%	3.60%	1.20%	2.40%	-1.90%	0.50%
Switzerland	1.50%	2.60%	-0.50%	3.10%	-1.10%	2.00%
Average	2.40%	2.00%	0.10%	2.00%	0.30%	2.30%
MSCI ACWI	2.70%	2.10%	0.60%	1.50%	0.60%	2.10%

Source: MSCI Barra

Dilution studies have primarily focused on DM predominantly due to lack of data across EM. However, the dilution effect does exist and is more pronounced in EM. Some of the major reasons contributing to this effect in EM include:

- Companies in EM tend to use more growth capital which isn't always deployed wisely. This leads to a rocky transition between corporate earnings and bottom line EPS.
- Corporate governance in EM is often weaker than in DM, where inadequate investor protection might allow "inside" shareholders to divert value from external shareholders.
- Dilution is an issue in markets dominated by majority state-owned companies where agency costs could be higher. Deference to political interests might affect EPS and shareholder value.
- To capitalise on growth, the pace of creation of new enterprise will be much higher in EM versus DM.

To better quantify the dilution effect in EM, we explore available data, while recognising the available time series is short. We replicate the MSCI Barra study for EM, albeit with a reduced timeframe (1998-2010). The start of this analysis roughly coincides with the beginning of the most recent super-cycle. We use the relevant MSCI index for each country and the MSCI EMU Index for Europe.



Region/	Real GDP	Real Stock	Real EPS		Real GDP -	Real GDP -
Country	Growth	Price Return	Growth Rates	P/E Change	Stock Return	EPS Growth
China	10.07%	4.98%	5.91%	-0.87%	5.08%	4.16%
India	6.95%	11.27%	8.05%	3.06%	-4.32%	-1.10%
S. Korea*	4.15%	13.06%	13.17%	-0.11%	-8.91%	-9.02%
Brazil	3.40%	10.16%	7.01%	2.94%	-6.76%	-3.61%
USA	2.15%	-2.37%	3.02%	-5.23%	4.52%	-0.87%
Europe	1.53%	-2.89%	2.82%	-5.56%	4.41%	-1.30%

Table 6: Real GDP, EPS, Price Growth, P/E Growth for select EM countries (1998-2010)

*For S. Korea, we use data between 2000 and 2010

Source: MSCI Barra, IMF, Bloomberg

An interpretation of results in Table 5 presents quite a few challenges. The dilution value for a number of countries is negative. The most extreme case is South Korea where we observe a -9% dilution rate. We see a similar pattern, though to a lesser extent, in Brazil and India. A possible reason for this occurrence is the composition of country indices used for this study. Multinational companies tend to be the biggest components of the local country index. Since large percentages of a multinational's revenue stream are derived outside the home country, earnings for such firms are more closely linked to global or regional GDP, rather than country GDP. A good example is the MSCI Korea index where Samsung Electronics represents close to 15% of the index. Samsung's overseas revenue represented approximately 80% of total revenue over the past five years. India presents a similar case where software outsourcing companies are significant components of the index. China, on the other hand, stands out from the crowd. We see a positive dilution rate of 4% for the China country index. In the case of China, some of the larger components of the index (China Mobile, Industrial & Commercial Bank of China, China Construction Bank) generate a significant proportion of their revenue at home. We can partially neutralise the effect multinational firms have on the GDP-EPS relationship by looking at an aggregation of countries. As the level of country aggregation increases, the bias of external linkages is reduced. We look at a regional aggregation using the MSCI EM Asia Index as our benchmark.

Table 7: Real GDP, EPS, Price Growth, P/E Growth for EM Asia index (1998-2010)

Region/	Real Stock				Real GDP -	Real GDP -
Country	Real GDP	Return	Real EPS	P/E	Stock Return	EPS Growth
EM Asia*	10.37%	8.60%	13.02%	-3.91%	1.77%	-2.65%

*For EM Asia, we use data between 2000 and 2010

Source: MSCI Barra, IMF, Bloomberg

Consistent with our aggregation assumption, we see the MSCI EM Asia index exhibits reduced negative dilution. However, the negative dilution rate persists. While prominent Asian multinationals have smaller weights (Samsung: 4%) within this aggregated index, their overseas revenue component still contributes to the disconnect between earnings and GDP growth.



2.1.5.2 Adjusting GDP Growth for Dilution

As a result of our dilution discussion, we reformulate the transfer equation between GDP and EPS.

GDP Growth -> Corporate Profit Growth -> Dilution Effect -> Earnings Per Share (EPS) Growth

The issue of negative dilution makes it hard to pinpoint a definitive dilution percentage for EM. We make an assumption about the degree of external linkage for EM and DM. For EM, we assume that non-domestic sources account for 50% of company revenues. While individual countries may have higher percentage of external revenues, we believe this number makes sense when using an aggregated index such as EM Asia. For DM, we attribute 30% of revenues to non-domestic sources. This assumption seems reasonable in light of the S&P 500 where around 30% of the revenues are derived from non-domestic sources. Based on our assumptions, we recalculate the dilution for EM (using EM Asia as a proxy) and DM (using US as a proxy).

Adjusted Dilution = Real GDP – EPS Growth (Local) EPS Growth (Local) = EPS Growth (Global) x % of Domestic Revenue

As an example, US EPS Growth (Local) = 3.02% (Table 5) x 70% = 2.11%

Table 8: Adjusted dilution for EM Asia and US indices (1998-2010)

Region/ Country	Real GDP	Real Stock Return	Real EPS (Local)	P/E	Real GDP - Stock Return	Real GDP - EPS Growth
USA	2.15%	-2.37%	2.11%	-5.23%	4.52%	0.04%
EM Asia*	10.37%	8.60%	6.51%	-3.91%	1.77%	3.86%

*For EM Asia, we use data between 2000 and 2010

Source: MSCI Barra, IMF, Bloomberg

Our revised calculation shows a 3.86% dilution rate for EM and a negligible rate for DM. We forecast a long-run dilution rate of 3.5% (lower than observed) for EM as we see a maturing of equity markets that are currently in early stages of development. For DM, we assume a long-run dilution rate of 1%. Applying the dilution rate to DM & EM growth rates, we arrive at the following forecasts for real EPS growth (= GDP Growth – Dilution Factor):

- DM Equity: 2.5% 1% (dilution) = 1.5%
- EM Equity: 6.5% 3.5% (dilution) = 3.0%



2.2 Calculating Expected Equity Return

Aggregating the various components of long term equity return, we arrive at the expected return forecast for DM and EM Equity.

Table 9: Expected Nominal Equity Return Forecast, USD

					Expected Return
	Real EPS	Expected	Dividend	Currency	(Nominal Return)
Asset Class	Growth	Inflation	Yield	Impact	USD
DM Equity	1.5%	2.1%	2.7%	0.5%	7.0%
EM Equity	3.0%	4.0%	2.2%	-0.5%	9.0%

Our currency impact incorporates an inflation parity assumption along with a 1% appreciation of EM currencies relative to DM currencies. As discussed previously, we choose to incorporate valuation changes as part of our tactical asset allocation process.

2.3 Equity Volatility

The presence of the super-cycle should not preclude the existence of the business cycle. A long term growth trend does not imply growth is strong and continuous over the entire period. The very nature of a business cycle implies markets are subject to bouts of extra volatility during its various phases.

While the long term growth trend is intact, we do not expect market volatility to decrease versus the historical trend. Our capital market assumptions forecast volatility for DM and EM equity roughly in line with historical norms both in absolute terms and on a relative basis. The forecast ratio of EM to DM equity volatility stands at 1.5 which is in-line with recent history.







One might question why our EM volatility estimates remain in line with historical norms. In the following table, we explore various factors driving EM volatility and how they might evolve over the next 10-20 years.

Table 10: Factors affecting equity market volatility

Factor	Description	Observation	Long Run Effect on EM Volatility
Capital Market Size & Diversification	Market Capitalisation; Number and concentration of stocks in a country index	Market capitalisation for Asia ex-Japan is projected to expand to USD 151 trillion (15% CAGR) by 2030; As new enterprises are launched and equity markets deepen, we expect more diversification in EM country indices	Large Decrease
Political Risk	The uncertainty associated with policy and regime change	We foresee a moderate increase in volatility as countries in emerging markets tackle structural and political reform	Moderate Increase
Trade Integration	The degree of participation of a country or region in global trade.	We believe emerging economies will represent more than half of world trade by 2030 (Super-Cycle Report). While this has some benefits, we believe greater integration into the global supply chain will increase volatility	Increase
Market Integration	Degree of integration between local and global financial markets	We expect EM equity markets to become better integrated with global markets in the long run. This should help reduce EM volatility. However, with increased integration, EM markets will now be susceptible to exogenous shocks	Neutral
Net Capital Inflows	Net capital inflows (FDI, portfolio investment) as a proportion of GDP tend to be larger in good times than bad times. A decline in capital inflows as a proportion of GDP adds to volatility	The difference in net capital inflows between good and bad times is much higher for EM versus DM. We expect this trend to continue in the near term but moderate over time	Increase
Consumption Volatility	Volatility in the level of consumption of individuals within the economy	Studies have shown consumption is 40% more volatile than income in EM. For DM, this ratio is close to 1. We expect this trend of EM consumption volatility to decrease very gradually over time	Neutral



3.0 Fixed Income – Overview

The Super-Cycle themes indicate a preference for equities and commodities over fixed income. An extended period of strong world growth implies the current low interest rate environment should revert to normal at some point in the future. US inflation should pick up from its current anemic level pushed by Federal Reserve monetary policy and high levels of US government debt. Additionally, a period of strong growth generally brings lower employment, competition for resources, and finally upward pressure on inflation. The combination of the above factors doesn't bode well for holders of fixed income in the short run. This raises a question about the long run role of fixed income in the strategic allocation.

Building a case for fixed income

Rapid urbanisation, an expanding middle class, and increased trade are major drivers of growth in the super-cycle. To support this growth, emerging economies will have to make large scale investments in infrastructure and productive assets. Research has shown there is a strong empirical relationship between a country's investment rate and its GDP growth rate. A study⁵ by Mckinsey Global Institute describes the "rule of 2.5" relationship where one percentage point of additional GDP growth requires additional investment of 2.5 percentage points of GDP. The implication is faster growing countries will need a higher rate of investment.



Sources: World Bank, Standard Chartered Research

Sources: World Bank, Standard Chartered Research

Real interest rates represent the cost of capital based on the balance between supply of (savings rate), and demand for (investment requirement), capital. An increase in investment demand will push interest rates upward over the next 20 years if not matched by a commensurate increase in saving. However, an increase in the savings rate faces headwinds given the efforts by emerging economies to increase consumption. While we forecast the imbalances between savings and investment will narrow over time, they will continue to exist.

⁵ McKinsey Global Institute, Farewell to cheap capital? The implications of long-term shifts in global investment and saving, December 2010



Chart 12: Forecast investment by region, % of GDP



Sources: World Bank, Standard Chartered Research



Sources: IMF, Standard Chartered Research

The implication is borrowers, particularly in certain growth economies, will have to pay more (a higher interest rate) to raise capital for investment. For fixed income investors, in the long run, a rise in interest rates will allow them to earn better returns versus the current low-rate environment. Rising real interest rates also reduce the value of equities making fixed income more attractive on a relative basis. A higher interest rate implies future cash flows from equity are discounted back to a lower net present value. While the allure of fixed income might not be similar to equities and commodities, we believe this asset class should play a role in our strategic asset allocation.

We explore sub-sectors of the fixed income asset class for pockets of opportunity on a long term basis. Consistent with our thinking on equities, we see EM providing a source of incremental return within fixed income. There are three drivers of return in EM Fixed Income:

- Growth of the EM debt asset class We anticipate a large-scale expansion of this asset class on the back of significant fund flows and as issuers turn to local markets for financing.
- Change in credit profile the credit characteristics of EM debt have been steadily improving. A majority of the EMBIG index is now investment grade.
- Attractive carry the asset class continues to offer an opportunity for incremental return over DM fixed income.

3.1 Growth of EM Fixed Income

EM debt is currently a small proportion of the global fixed income market. According to data published by BIS, EM debt currently represents 11% of the overall debt market. Over the next twenty years, we expect EM debt markets to grow in size fueled by economic growth and related per-capita income growth. The rate of growth will be similar over the next two decades to the one seen in the last decade. However, we expect the growth trajectories of international and domestic EM debt to be very different. Based on our projections, we estimate EM debt will represent about 32% of global debt in 2030.

Highlights

- We forecast EM debt will increase from 11% to 32% of global debt by 2030. This is based on a CAGR of 15% for domestic debt and 10% for international debt.
- Local currency debt will represent around 90% of total EM Debt.
- We expect the size of non-Japan Asia's domestic debt to increase to USD 90trn by 2030. This will be roughly the same size as the US domestic bond market.
- China (52trn) will continue to be the country with the largest share of Asian domestic debt.
- International securities debt in Asia is expected to grow to around USD 5.2trn by 2030.



96,533

13,832

36,509

	a	as of Sept 2010		aso	as of Sept 2030 (Est.)	
	Intl. Debt	Domestic Debt	Total Debt	Intl. Debt	Domestic Debt	Total Debt
All countries	27,621	66,117	93,738	178,034	295,342	473,376
Developed countries	24,991	57,373	82,363	168,125	152,227	320,352
Developing countries	1,473	8,744	10,217	9,909	143,115	153,024
Africa & Middle East	217	286	504	1,462	4,689	6,150

5,725

692

2,041

6,147

1,064

2,503

2,840

2,502

3,106

Table 11: Global debt market forecast (amount outstanding, in billions of USD)

422

372

462

Source: BIS, Standard Chartered, Group Wealth Management

93,693

11,330

33,403

3.1.1 Drivers of Growth in EM debt

A combination of structural forces and asset flows will drive growth in the EM debt asset class.

Structural contributors to growth of EM debt

A consequence of rapid economic development is a need for corporates to raise capital to fund the growth. As discussed earlier, economies become more capital intensive as they develop. As local currency debt markets in EM present improved options in terms of size and tenor, we expect local corporates to switch to these markets and away from international debt.

Another result of economic growth is an expansion of corporate and consumer financing demands on financial institutions. Banks and other financial institutions will turn to public market financing as a means to bolster their capital base.

Governments are increasingly raising financing in local currency terms. This arrangement reduces variability in cash flow requirements to service their debt.

Asset Flows

Asia & Pacific

Latin America & Caribbean

Europe

Flows into EM debt have been significant over the past few years with two-thirds of every dollar allocated to Asia and other EM in 2010 allocated to local-currency debt. We expect this trend to continue driven by flows from multiple sources:

- 1) Local institutional investors We foresee an expansion in the local institutional investor base. Increasing wealth levels serve as a catalyst in moving savings from bank deposits to collective investments including mutual funds, insurance, and pensions.
- 2) Overseas investors Institutional investors (pension funds and insurance companies) will increasingly look to add EM debt exposure especially as the credit profile of the asset class improves. Additionally, the search for yield to reduce the asset-liability mismatch will spur investment in this asset class. Finally, the prospect of appreciation in EM currencies will further bolster the case for EM debt.
- 3) Sovereign wealth funds Despite suffering a large scale loss of AUM during the recent credit crisis, sovereign wealth funds continue to manage around USD 4 trillion in assets. A post-crisis aversion to equity combined with a search for diversified yield will drive asset flows towards EM debt.



3.2 EM Credit Fundamentals

EM sovereign debt has shown a steady improvement in its credit profile over the past fifteen years (Chart 14). As of May 2011, the Investment Grade (IG) portion of the EMBIG Index stands at 56%.

- The strong long-term prospects for emerging economies and potential for further re-rating of EM debt makes the case for a strategic allocation to this asset class.
- In contrast, the ratings outlook for a number of DM remains uncertain. Portugal, Ireland, Iceland, Greece, Spain, and even the US have been downgraded recently and remain on negative outlook by either Moody's or S&P.



Chart 14: JP Morgan EMBIG Index, Breakdown by credit rating (1996-2011)

Source: JP Morgan

3.2.1 EM Credit Profile and Asset Class Risk

As the credit profile of EM debt continues to improve, we anticipate a reduction in volatility of returns associated with this asset class. Our long run assumptions utilise a lower annual standard deviation as compared to the historical norm. On a historical basis, the volatility of the JP Morgan EMBI has been 14.6% in USD terms since its inception in 1994. Our strategic volatility forecast is 13.6% - a 100bps reduction versus historical volatility to account for the improving credit profile of EM debt. In addition, EM debt plays a role in portfolio diversification given its low correlation with DM asset classes.



3.3 EM Fixed Income – Attractive Carry, Local Opportunities

Although EM yields have declined in the last few years, the decline in EM yields has been roughly in line with DM market yields. The real yield differential between EM and DM as measured by the JP Morgan GBI (local currency Government Bonds) index for the respective region currently stands at around 400bps. Additionally, EM currencies should benefit from the growth in scale and increased trade volumes in emerging economies. The combination of attractive real yield spreads and nominal currency appreciation bodes well for EM fixed income.





EM sovereign risk has been re-priced in the past few years as markets have recognised the improving credit fundamentals of EM countries. There is a strong connection between sovereign risk and cost of financing for firms located within that country. This linkage leads certain rating agencies to establish a "sovereign ceiling policy". While there is strong connection between sovereign risk premia and corporate debt, we believe the risk reduction in EM sovereigns hasn't been completely captured in the corporate space. We see opportunities for outperformance in EM local currency corporate debt. Charts 16 & 17 highlight the spread premium that exists in the corporate High Yield (HY) and Investment Grade (IG) space. Our strategic return forecasts reflect this conviction. Our EM Local Currency Corporate return forecast (in USD) is 7% annualised versus 6.4% for DM HY and 5.0% for DM IG. Given the forecast is in US dollar terms, the return could be potentially higher in local currency terms if we consider currency appreciation in EM FX.



3.3.1 Growth of the EM Corporate Sector

There is significant room for market expansion in the corporate space. EM Corporate issuance has been growing steadily with EM corporate Eurobond issuance roughly double sovereign issuance in 2010. Local currency debt continues to find favour and represents around two-thirds of the EM corporate bond market. A significant amount of new EM corporate issuance hasn't been refinancing of debt coming due but primary issuance by new corporates. While these corporates have been in business for years, as sovereign credit has improved and yields have dropped dramatically, the cost of financing has become favourable for EM corporates. In particular, corporates that have revenue streams in hard currency can match these against hard currency liabilities. Some of the recent corporate issuance has met requirements for inclusion in global benchmark bond indices. The combination of improving volumes, tradable issuance size, and liquidity across the EM corporate space should further the growth of this EM sub-sector.



Chart 16: Spread differential, CEMBI NIG vs. DM NIG

Source: JP Morgan



Chart 17: Spread differential, CEMBI IG versus DM IG

Source: JP Morgan



4.0 Commodities

Growth associated with a super-cycle brings increased demand for commodities. Depending on the supply response, there is often a connected super-cycle in commodity prices. High urbanisation rates and growth in the middle classes in Asia and other developing regions will have a large impact on the demand for commodities. While commodity consumption in the US will be higher on a per-capita basis, the sheer numbers in Asia will be overwhelming.

The outsized growth of commodity markets in recent years has placed a spotlight on the asset class and its role within an asset allocation. We look at two fundamental questions related to commodities:

Q: Will super-cycle growth and associated commodity demand affect long term commodity returns in a meaningful way?

An increase in commodity demand does not mean a corresponding price increase is inevitable. A disconnect between demand and prices can arise through factors such as insufficient production, delayed supply responses, price controls, and technological innovation.

Copper and zinc present classic examples of commodities reacting strongly to super-cycles given their low inventory levels and inelastic supply. In 1890, roughly halfway through the super-cycle, copper traded at USD 9,790/tonne (t) in 2010 prices. Today, copper is trading at USD 8,850/t.



Chart 18: Copper and zinc prices during the super-cycle

Historically, oil's price performance has differed from other commodities during the super-cycles (Chart 19). During its infancy (starting in 1860), the oil market was exposed to periods of over-production followed by careless depletions of reservoirs, creating considerable volatility. Price controls during the second super-cycle reduced volatility, while oil's price moves since 2000 have shown increased volatility. Wheat's response has also varied from one super-cycle to the next. During the first period, reduced shipping costs and times due to the advent of steamships, combined with the opening up of the Americas, depressed prices at times. The second period witnessed the so called 'green revolution', which significantly increased wheat output, thus dampening prices.

Sources: Bloomberg, USGS, US Dept of Labour, Warren & Pearson





Chart 19: Oil and Wheat in 2010 prices (bbl and bushels)

Our projections of large scale and rapid urbanisation will have significant implications for commodity demand. However, as evidenced by history, the nature of individual commodities influence the supply, demand, timing and magnitude of their price evolution during super-cycles.

While we are bullish on the commodity complex as a whole, the variability in individual commodity returns makes it difficult for us to assign an outsized allocation to this asset class as part of the strategic asset allocation. Our approach is to take a minimum strategic position in commodities and tactically overweight or underweight the asset class based on short term return opportunities.

The S&P GSCI index, for the period 1970-2010, had an average annual return of 9.95% while the DJ-UBS Commodity index had a return of 6.39% since inception in 1991. Based on monthly return data, the mean annual volatility for the GSCI (1970-2010) and DJ-UBS (1991-2010) index was 20% and 15% respectively. For our strategic assumptions, we choose to use an expected annual arithmetic return of 6.0% and an expected annual standard deviation of 22%. These assumptions are derived by Mercer Consulting using a factor based model. Our long-run strategic assumptions are fairly similar to historical averages. This is consistent with our approach of extracting returns from the commodity asset class on a tactical basis.

Q: Has the large-scale arrival of financial institutions in commodity markets led to a closer link with equity markets?

A looming question over the past few years has been "Does the "financialisation" of commodities mean flows rather than fundamentals drive price with the implication that commodities are no longer portfolio diversifiers and have become linked with the risk trade?"

Sources: Bloomberg, US Census Bureau, US Dept. of Labour, Warren & Pearson





Source: Datastream

Recent trends, as demonstrated in the chart above, highlight investor concerns about the commodity asset class. The close correlation between commodities and other risky assets has renewed debate about the role of commodities as a portfolio diversifier. We use a combination of correlation, mean reversion, and extreme event analysis over various time horizons to understand if fundamental characteristics of this asset class have changed.



4.1 Correlation Analysis

We use historical weekly data starting in 1991 to test for correlation between commodities and equities. Over the entire period, we find a mildly positive correlation between the S&P 500 and the GSCI and DJ-UBS indices. This slight positive correlation is heavily influenced by the most recent (2008-2011) sub-period. For most of the other sub-periods analysed, correlations between the S&P 500 and commodity indices were close to zero.

Table 12: Correlations between equity and commodity markets (1991-2011)

Weekly Returns (1991-2011)				
	S&P 500	GSCI	DJ-UBS	
S&P 500	1.0000			
GSCI	0.1917	1.0000		
DJ-UBS	0.2399	0.9073	1.0000	

Weekly Returns (1991-1996)

	S&P 500	GSCI	DJ-UBS
S&P 500	1.0000		
GSCI	-0.0409	1.0000	
DJ-UBS	0.0001	0.8308	1.0000

Weekly Returns (2001-2006)

	S&P 500	GSCI	DJ-UBS
S&P 500	1.0000		
GSCI	0.0090	1.0000	
DJ-UBS	0.0597	0.9129	1.0000

Weekly Returns (1996-2001)

	S&P 500	GSCI	DJ-UBS
S&P 500	1.0000		
GSCI	0.0455	1.0000	
DJ-UBS	0.0503	0.9181	1.0000

Weekly Returns (2006-2011)

	S&P 500	GSCI	DJ-UBS
S&P 500	1.0000		
GSCI	0.2117	1.0000	
DJ-UBS	0.2596	0.9145	1.0000

Weekly Returns (2008-2011)

	S&P 500	GSCI	DJ-UBS
S&P 500	1.0000		
GSCI	0.6496	1.0000	
DJ-UBS	0.6770	0.9408	1.0000

Source: Group Wealth Management, Standard Chartered



4.2 Mean Reversion in Correlations

For the period over which we analysed correlations, we also see strong evidence of mean reversion (Chart 21). While correlation between commodities and equity has become more volatile over time, it still fits the pattern of mean reversion.



Chart 21: Mean reversion in Equity-Commodity Correlations

While the recent period (2008-2010) of positive correlation between commodities and equity is remarkable in its

strength and tenor, the crisis that preceded it was equally significant. Similar behaviour was observed during the economic slowdown of the 1980's, the post gulf war period, and the period following the tech crisis. In each of these cases, there was an eventual reversion to the mean.

4.3 Extreme Correlation Analysis

Our analysis has shown equities and commodities are uncorrelated under "normal" market conditions. However, it's possible these markets move in sync under "stressful" market conditions. Büyükşahin, Haigh, and Robe⁶ analysed this question using the joint return distribution for equities and commodities over a 20-year period. Chart 22 is a graphical representation of the joint distribution. The dotted line shows the number of observations in each percentile. While equity-commodity correlations are generally low (between the 25th and 75th percentiles), they tend to strengthen during extreme events. Equity-commodity correlation is mildly positive in the upper tail of the joint distribution. However, when equity and commodity returns are both negative (negative tail), the two return series are *negatively correlated*.

⁶ Büyükşahin, Bahattin, Haigh, Michael S. and Robe Michel A., Commodities and Equities: Ever a "Market Of One"? The Journal of Alternative Investments, Winter 2010



Chart 22: Extreme event cross-correlations



Source: Büyükşahin, Haigh, and Robe, Winter 2010

4.4 Role of Commodities in Strategic Asset Allocation

Our analysis in the previous section indicates the relation between commodity and equity returns has not changed significantly over the past twenty years. Commodities continue to be a source of diversification for equity investors.

As part of our strategic forecasts, we assume commodities are uncorrelated to equity and fixed income asset classes. We see commodities playing two major roles in the strategic asset allocation:

- Risk Diversifier
- Inflation Hedge

Risk Diversifier

- Commodity prices are driven by supply and demand of the underlying commodities while Equity and Fixed income prices are affected by long-term expectations. As a result, commodity prices act differently versus stock/bond prices at different stages of the business cycle.
- Commodities are positively correlated with inflation while stocks and bonds are negatively correlated with inflation.

Inflation Hedge

- Storable commodities related to the intensity of economic activity generally exhibit positive correlation with unexpected inflation.
- Specifically, commodities in the energy, precious metals, and industrial metals sectors show positive correlations with unexpected inflation.



5.0 Putting Ideas into Action – The Strategic Model

Combining our ideas on major asset classes, we build an asset allocation model for an investor with a moderate risk profile. As discussed earlier, we divide the equity world into DM and EM. Within DM, we focus on the US, EU-27, and Japan. Within EM, we focus on Asia ex-Japan and Other EM (LATAM, CIS, MENA, Sub-Saharan Africa). On the fixed income side, we split the universe between Investment Grade and High Yield with a further sub-division between DM and EM debt.

Table 13: Strategic Asset Allocation, Moderate Investor (USD)

Asset Class	Sub-Asset Class	Moderate
	IG Developed World	25
	IG Emerging World	10
Fixed Income	HY Developed World	5
	HY Emerging World	5
		45
	North America	10
	Europe	10
Equity	Japan	2
	Asia ex-Japan	16
	Other EM	7
		45
Commodities	Commodities	10
	DM Equity Emerging + Frontier Market Equity	

Source: Group Wealth Management, Standard Chartered

5.1 Comparing the Strategic Model – Growth and Market Size Forecasts

To put the strategic allocation in context, it is useful to compare the weights assigned to each asset class with projections for the future economy and market size.

5.1.1 Perspective on Strategic Equity Allocation

We compare the strategic equity allocation versus GDP forecasts outlined in the Super-Cycle report. Growth forecasts for the super-cycle project a world split 35%/65% in GDP terms between DM and EM in 2030. Within the Equity asset class of our moderate strategic portfolio, we see a 50%/50% split between these markets.





Chart 23: Super-Cycle forecast – GDP (by percent) vs. Strategic Equity Allocation (Moderate)

Source: Standard Chartered Research, Standard Chartered Group Wealth Management

We highlight the reasons for this distinction between GDP growth and strategic Equity Allocation, some of which have been highlighted earlier:

- 1. The effect of dilution creates a disconnect between GDP growth and Earnings Per Share. The dilution effect is caused by new share issuance (either by new or existing enterprise) and inefficient use of growth capital.
- 2. Certain countries place restrictions on foreign investment in their domestic markets. For instance, foreign institutional investors have very limited access (through the QFII program) to the nearly US\$3 trillion market cap in the China A-share domestic equity market. This reduces the opportunity set for global investors and constrains the amount we can allocate to EM Equity.



5.1.2 Perspective on Strategic Fixed Income Allocation

EM Debt is currently a small proportion of the global debt market. According to data published by BIS (as of Sept 2010), EM debt represented about 10% of the overall debt market. Our forecasts (Table 12) call for EM debt to grow to around 35% of the global debt by 2030. The strategic asset allocation (Moderate) has an exposure of 40% to EM debt relative to total debt. This is consistent with our expectation of growth in EM debt markets. To reiterate our conviction, we see growth in EM debt driven by a re-rating of credit risk and increased local currency issuance to support economic growth.

Table 14: Global Fixed Income Market (amount outstanding, in billions of USD)

	as of Sept 2010		as	as of Sept 2030 (Est.)		
	Intl. Debt	Domestic Debt	Total Debt	Intl. Debt	Domestic Debt	Total Debt
Developed countries	94%	87%	89%	94%	52%	68%
Developing countries	6%	13%	11%	6%	48%	32%

Source: BIS, Standard Chartered Bank, Group Wealth Management

Table 15: Strategic Fixed Income Asset Allocation, Moderate Investor (USD)

Asset Class	Weight
IG Developed World	50%
HY Developed World	10%
IG Emerging World	30%
HY Emerging World	10%



6.0 Risks

Our strategic allocation is based on key assumptions about global and emerging market growth during the supercycle period. Therefore, it is worth evaluating the risks that might alter the growth trajectory. We focus on three primary risks:

- China suffers a hard landing over the next decade
- The risk of a protracted recovery in the United States
- Rising inflation in emerging economies

A hard landing in China

While super-cycle growth isn't completely dependent on China, it is the dominant economy in our forecasts. We expect China to see its share of nominal global GDP increase from 9% to 24% in twenty years. A large portion of Chinese growth is dependent on investment which currently runs at about 40% of GDP. If investment activity were to slow down, there would be a corresponding impact on growth. The drop in investment activity would have to be offset by significant rise in consumption and government spending. However, given a large portion of investment is by government and state-owned enterprise, the scope of continued investment seems positive. An important question is whether the investment is productive. A surfeit of investment may produce excess capacity and ultimately a decline in profitability. Concurrently, bubbles may form and bad loans may accumulate in the system. An aggregation of these conditions may facilitate a sudden reversal in the China story. While such an abrupt downturn isn't our central scenario, our long run forecasts do call for a gradual slowdown in growth and investment in China.





According to the super-cycle forecast, China's growth will decelerate gradually as the economy matures, to 8% during the 2012-15 period, 7% from 2016-20, 6% from 2021-26, and 5% from 2027-30. This growth, combined with currency appreciation should still be enough for China's nominal GDP to exceed that of the US by 2021.

China will have to actively manage its risk to mitigate any issues that arise. A huge burden rests on the government's shoulders to implement structural reforms, like WTO accession, which prepare the economy for more competition and efficiency. Opening up the services sector to competition would raise growth and efficiency while boosting jobs and income. Other positive measures might include interest rate and exchange rate reform.



From a portfolio perspective, the diversification inherent in our balanced asset allocation will provide a measure of protection to investors in the event of a hard landing in China. Bond markets could benefit by a decrease in world inflation and certain non-China equity markets might rally as well.

Risk of protracted recovery in the US

There are fears the US might be in an extended period of stagnation similar to Japan in the 1990s. A slow recovery in the US does not preclude growth in emerging economies. In fact, a low interest rate environment in the West has proved to be a stimulus for emerging economies in recent years. However, global super-cycle growth would be at risk since a large proportion of world output is still dependent on the US. This includes certain emerging economies which are closely linked to US performance.

The risk of an extended slowdown in the West will have to be tackled with strong policy measures. A delicate balance has to be struck between provision of monetary stimulus and creation of long-term inflation. Growth in the emerging world might help the US as global demand increases. The US continues to be the creative leader in many industries and fosters a strong entrepreneurial spirit. We estimate trend economic growth to be 2.5% over the long-term.

Rising inflation in emerging economies

Emerging economies are growing strongly, but face rising inflation that threatens to bring sharp monetary tightening and a destabilisation of growth. A major reason for the recent acceleration in CPI inflation is higher food and energy prices, driven by rising demand amid the global recovery and uncertain weather patterns. The food and energy basket is especially relevant for EM economies where it forms a much larger component of consumer expenditure. In Asia, for example, 30-55% of consumer expenditure goes towards food and energy. While central banks will engage in monetary policy tightening to tackle inflation, there is a risk they might act too late or, in some cases, misdiagnose the situation and make things worse.

Of particular interest is how China will respond to policy measures. Any sign of a misstep by authorities could upset world markets and derail super-cycle growth in the long run. However, we're already seeing a cooling in China in response to policy tightening. The speed with which the recent tightening in Chinese monetary policy has fed through into the economy indicates a faster transmission mechanism than the West. We do not see a big risk of a hard landing given that the growth slowdown is policy-guided in nature. Based on our expectation that the US and EU will recover in 2012, we expect China's GDP growth come in between 9-10% in 2012 and 2013. Inflation is expected to follow; we expect CPI inflation to start rising again in Q3-2012 and peak above 6% y/y in Q2-2013 before retracing towards 4% by end 2013. In general, we expect China to continue to manage the balancing act between monetary policy and sustained growth.

While inflation is the primary risk for emerging economies in the near-term, we believe the long run growth trend is intact. A peaking in food price inflation may allow headline rates of inflation to ease in the coming months. However, policy makers will need to remain vigilant and prepared to use multiple tools including higher policy interest rates, reserve requirements, and macro-prudential measures such as liquidity and capital ratios.



7.0 Concluding Thoughts

In the long run, we feel there's opportunity for outperformance in EM driven by a period of high growth ("super-cycle"), increased trade, urbanisation and high rates of investment. While there might be leakage between growth and returns ("dilution"), an increased allocation to EM equities should prove beneficial to investors. In the commodity space, we expect an upward trend in the long run. However, given the volatility of individual commodities and changing supply-demand dynamics, our strategic allocation maintains a nominal allocation to this asset class. We will implement our views on individual commodities via a tactical asset allocation process. Fixed income isn't our preferred super-cycle asset class. However, it plays an important role for investors with a conservative leaning. Within this asset class, we see opportunities within sub-sectors such as EM local government and corporate debt. Our analysis is predicated on the existence of certain macroeconomic conditions necessary for growth. A change in these variables might affect the trajectory of future growth. We will monitor these variables on a periodic basis and update our allocations as necessary.

While growth prospects in EM remain strong, it is important for investors to keep a few points in mind when building allocations:

1 Starting valuations matter: As we've seen earlier (Table 2), while valuations might not have a major impact on return in the long run, the entry point is crucial in influencing portfolio return. Investors should be wary about diving headlong into expensive markets based on an expectation of outsized growth. A pertinent question is whether emerging market growth expectations are already factored into market valuation. While there has been a reasonable run up in EM equities in recent years, we still feel that most emerging markets are trading at very reasonable multiples. On a forward P/E basis, EM Asia is trading at a 10% discount to its 2-year average. China and India are trading at a 17% and 12% discount respectively using the same metric.

	Region/Country	12M Fwd P/E	Discount vs. 2-yr Average
EM Asia		11.35	-9.9%
China		10.49	-17.3%
India		14.34	-11.5%
S. Korea		9.66	-3.0%
Indonesia		13.64	0.6%
Brazil		9.28	-16.2%
Russia		5.94	-14.5%

Table 16: MSCI 12-Month Forward P/E Ratio

Source: Datastream





Chart 25: MSCI 12 Mth Forward P/E Ratio: EM Asia, China & India (as of June 13, 2011)

Source: Datastream, Group Wealth Management, Standard Chartered



- 2 Benchmark selection: Mainstream indices by which equity asset classes are benchmarked may not fully capture the growth in GDP or equity market capitalisation. For instance, the MSCI AC World Index places restrictions on companies based on free float percentages, foreign ownership limits, and other investment restrictions. An alternative might be to use a GDP weighted benchmark such as the MSCI GDP Weighted family of indices.
- 3 Emerging today, developed tomorrow: Over the long term, we expect emerging markets to "graduate" as they move along the development spectrum. Korea, for instance, is part of the MSCI Emerging Markets Index and on the cusp of being upgraded to a Developed Market. This raises the question of whether fundamental characteristics of the Emerging Markets asset class will change over time. While there will be a degree of attrition to DM, we expect a fair number of new entrants as Frontier Market countries become more active participants in the global economy and thereby upgraded to EM status.
- 4 Accessing "dilution" One reason for the wedge between GDP growth and earnings is the creation of new enterprise. Existing shareholders can only tap into the growth of established enterprise. Venture capital investments present a way to access the entrepreneurial capitalism that drives a large proportion of economic growth.
- 5 Interconnected world: In an increasingly inter-dependent world, it is important to understand the sources of revenue for firms prior to making an investment. For instance, an EM corporate might derive a large percentage of revenues from Western markets, reducing its participation in home country growth. On the other hand, companies in developed countries might benefit from the success of emerging countries. International companies with a strong EM business, especially those that can maintain their technological or brand position as emerging countries catch up, would fall into this category.



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