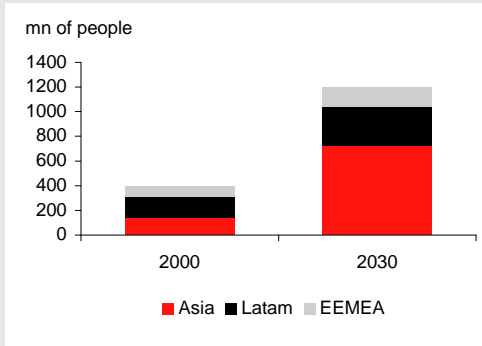


## GLOBAL

# Investment ideas

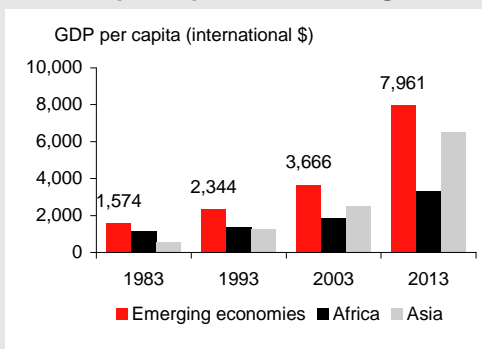
29 May 2008

### The size of Generation A is expanding



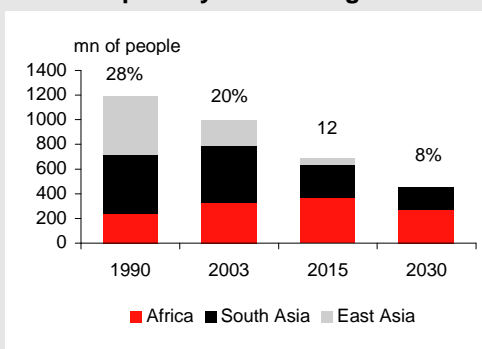
Source: World Bank, Macquarie Research, May 2008

### Incomes per capita are doubling



Source: IMF, May 2008

### Absolute poverty is declining



Source: World Bank, Macquarie Research, May 2008

### Analyst

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## Generation A – emerging aspirations

### Event

- We believe the world is in the midst of a silent revolution, as global economic power shifts from the old developed world to the newly emerging economies, underpinned by expanding middle classes in the emerging economies. The massive size of the new 'aspirational' middle class is permanently changing the world in which we live. We call this change the rise of 'Generation A'.

### Impact

- Generation A comprises people with an annual income between US\$3,000 to US\$5,000. These people have moved to a larger city and own a refrigerator and a low cost mobile phone service for the first time; are considering buying their first car and taking their first holiday, while pursuing higher education and requiring more healthcare and financial services.
  - The ranks of Generation A are likely to grow, as per capita incomes double and those living in poverty decline over the next 20 years. The new economic empowerment of Generation A is now evident in many of the 'mega trends' that are playing out in the global economy today.
  - The rise in per capita incomes will have a massive impact on global population demographics, in our view, where this year for instance, the world's urban population will equal the rural population for the first time. We expect growing populations will be concentrated in the urban areas of Asia and Africa.
  - Generation A's preference to live in urban areas will require massive investment in infrastructure by governments to ensure job creation and sustainable economic growth. Infrastructure investment in electricity, roads and mobile telephony are priorities for governments.
  - As personal incomes increase, people tend to consume more, including the basics such as water, sanitation and electricity generation (particularly when coming out of poverty), as well as consumer goods such as cars, refrigerators, air conditioners and luxury brands.
- ### Outlook
- We believe the massive potential size of Generation A in the next 15 years ensures that it will be the most influential and powerful generation in the world's history. With per capita GDP in the emerging markets currently still only two-thirds of the magic US\$3,000 mark we think is required for 'consumption take-off', the new mega trends in the global economy can only continue to intensify.
  - Generation A's increasing share of global income will irreversibly change world demographics and raise demands for natural resources, infrastructure and use of the environment. Most importantly, we believe many opportunities will be created for savvy and forward thinking investors, particularly in asset classes such as infrastructure, climate change, commodities and consumption-related plays.

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# Generation A – emerging aspirations

## Talking about my generation

- We believe the world is in the midst of a silent revolution, as global economic power shifts from the old developed world to the newly emerging economies. The main driver of this shift has been the expanding middle classes in the emerging economies of Asia, Latin America, Eastern Europe, Middle East and Africa (EEMEA). The massive size of this new ‘aspirational’ middle class is permanently changing the world in which we live. We call this change the rise of Generation A.

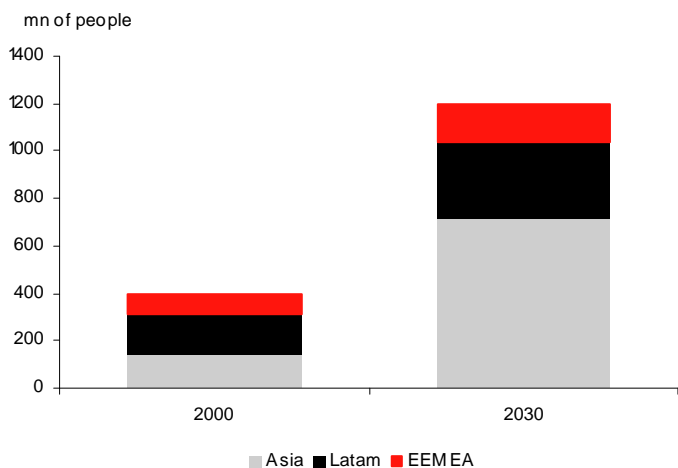
### Who are Generation A?

- Generation A is not necessarily a specific region or socio-economic group, but is a stereotype of people who are moving up the income ladder and have an annual income between US\$3,000–5,000. These people have moved to a larger city and now own a refrigerator and a low cost mobile phone service for the first time; are considering buying their first car and taking their first holiday, while pursuing education qualifications and requiring more healthcare and financial services.

### Gen A ranks are swelling

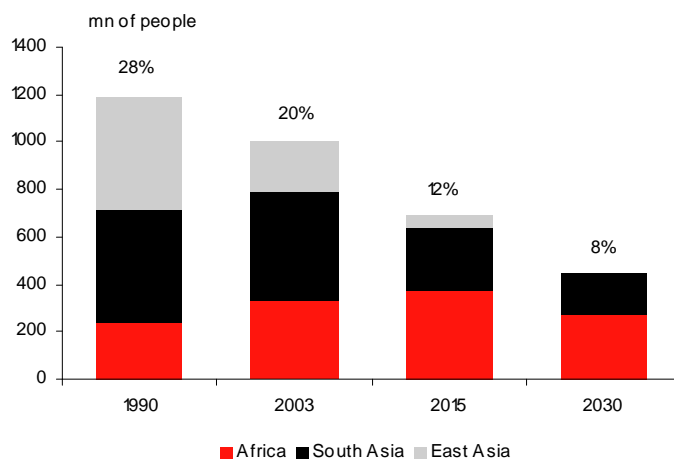
- The ranks of Generation A are growing and are likely to continue to grow as per capita incomes double and those living in poverty decline. According to estimates from the World Bank, by 2030, 1.2 billion people in developing countries — 15% of the world’s population — will belong to the global middle class, up from 400 million in 2000 (see Figure 1). Indeed, the percentage of people living in absolute poverty is expected to fall from 20% in 2003 to around 12% and 8% in 2015 and 2030, respectively (see Figure 2).
- Asia will provide the bulk of the new Generation A’ers, especially as the number of people living in poverty in East Asia trends to almost zero by 2030. The large shift in relative prosperity of the global population will impact upon social and political institutions, the movement of people and the climate.

**Fig 1 The ranks of Generation A are expanding**



Source: World Bank, Macquarie Research, May 2008

**Fig 2 Sharp reductions in absolute poverty**

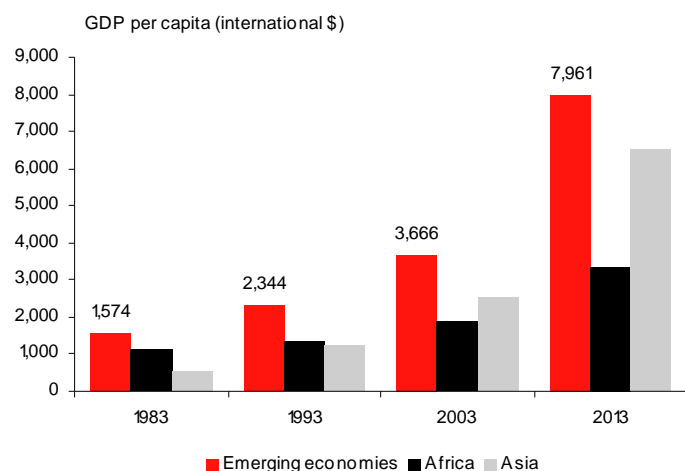


Source: World Bank, Macquarie Research, May 2008

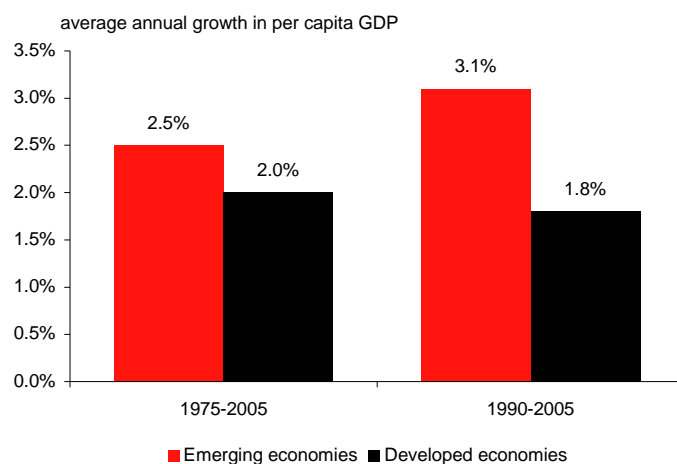
### Gen A’s incomes are rising

- Underpinning the economic empowerment of Generation A is the steady increase in per capita incomes. Although the level of per capita income in the emerging market remains well below that of the developed economies (or alternatively Generation Z), the rate growth in per capita GDP has been increasing, albeit there is some way to go to bridge the gap. Increased global trade in goods and services, transfer of technology, finance and migration within the world economy have supported the rise of Generation A.

- For instance, the rate of GDP growth in the emerging economies is now more than double the pace of the developed economies, at around 7%. Per capita incomes have continued to increase as a result, with per capita incomes in the emerging economies lifting from US\$1,570 in 1983 (using the IMF's international dollar measure) to US\$5,200 last year. Per capita income is expected to lift to around US\$8,000 by 2013 according to IMF estimates, led by developing Asia and Africa (see Figure 3).
- Generation A has therefore made impressive progress in narrowing the income gap and taking a greater share of the world's wealth since the beginning of this decade. The World Bank expects the current 3.1% per annum increase in per capita income growth to continue over the coming 20 years, which is almost double the pace of income growth in the developed economies (see Figure 4).

**Fig 3 Per capita GDP lifting in emerging economies**

Source: IMF, May 2008

**Fig 4 Income gap is narrowing**

Source: World Bank, May 2008

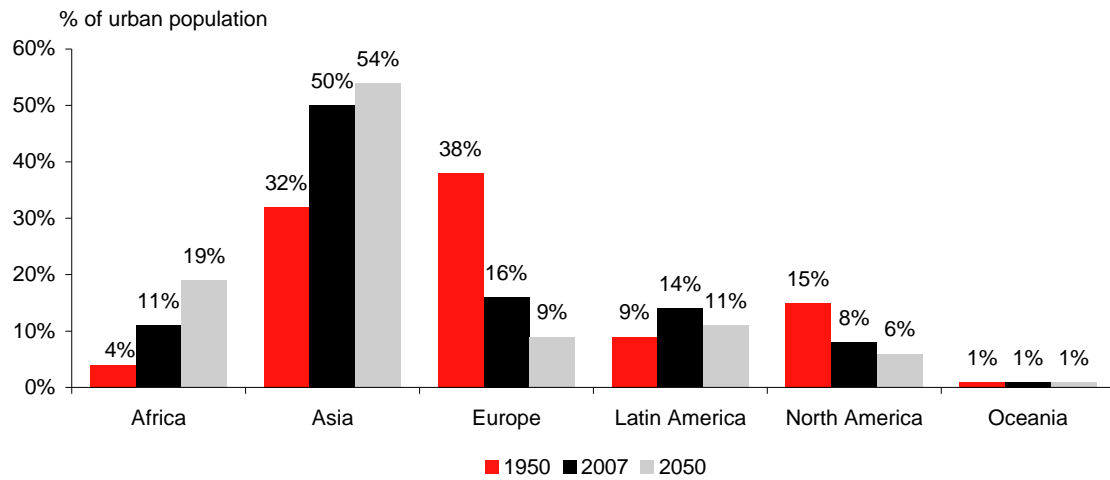
### The Gen A effect

- The rise in per capita incomes make Generation A a powerful economic force. This new found economic power is now evident in many of the 'mega trends' that are currently playing out in the global economy. The mega trends in which Generation A play a lead role include:
  - ⇒ changing global demographics;
  - ⇒ rapid urbanisation and increased demand for basic infrastructure; and
  - ⇒ changing consumption and lifestyle patterns.

### Setting a new global demographic course

- We believe the rise of Generation A will have a massive impact on global population demographics. The most telling is that for the first time in history, the urban population will equal the rural population of the world this year and, from then on, the world population is projected to be urban in its majority (around 70% by 2050).
- Between 2007 and 2050, the world population is expected to increase by 2.5 billion, passing from 6.7 billion to 9.2 billion. According to the United Nations 2007 Population Report, urban areas of the world are expected to gain 1.3 billion new Generation A'ers between 2007 and 2025, with most of this population growth concentrated in the urban areas of Asia and Africa (see Figure 5).
- The number of cities with inhabitants between one and five million is expected to account for 23% of the world's urban population, with the number of these cities increasing from 361 in 2005 to 524 in 2025. Around 40% of these cities will be located in China.

**Fig 5 Distribution of the world's urban population skewed to Asia and Africa**

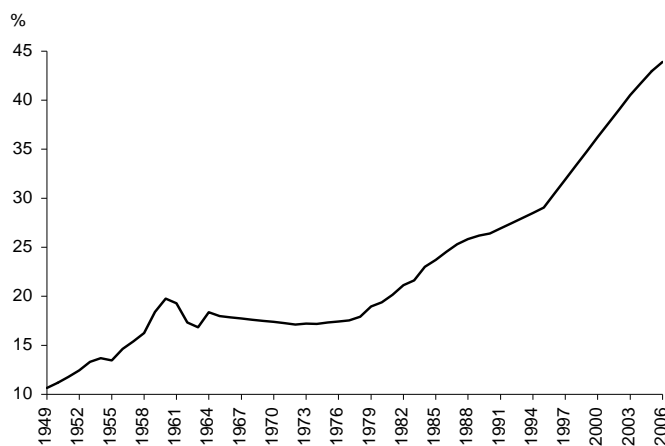


Source: United Nations – World Urbanisation Prospects, February 2008

**Urbanisation needs infrastructure**

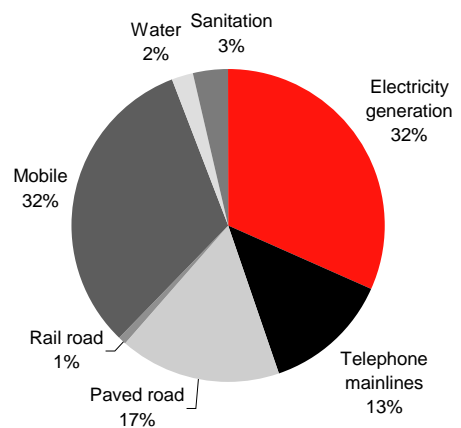
- Generation A's preference to live primarily in cities will raise demands for a better quality of life, improved infrastructure and enhanced environmental and government services. The secular trend towards urbanisation means that governments must invest heavily in infrastructure, to not only satisfy the aspirations of Generation A, but to ensure that economic growth is sustained.
- For instance, China must invest heavily in infrastructure in order to generate the 10% plus GDP growth needed to create enough jobs to meet the government's projection of 70% urbanisation by 2030. As Figure 6 shows, China's urbanisation rate is already at around 45% and is expected to increase by one percent each year.
- Areas of priority for infrastructure investment include basic essentials such as water, sanitation and electricity, especially when people are coming out of poverty, while significant investments in mobile telephony infrastructure, road and railway networks are also required to meet Generation A's needs for greater connectivity (see Figure 7 and a previous report entitled *Investment ideas: GEM infrastructure — a growth story*, 14 March 2008 for more detail).

**Fig 6 China's urbanisation rate soars**



Source: Datastream, CEIC, May 2008

**Fig 7 Investment needs in developing economies 2005-10**

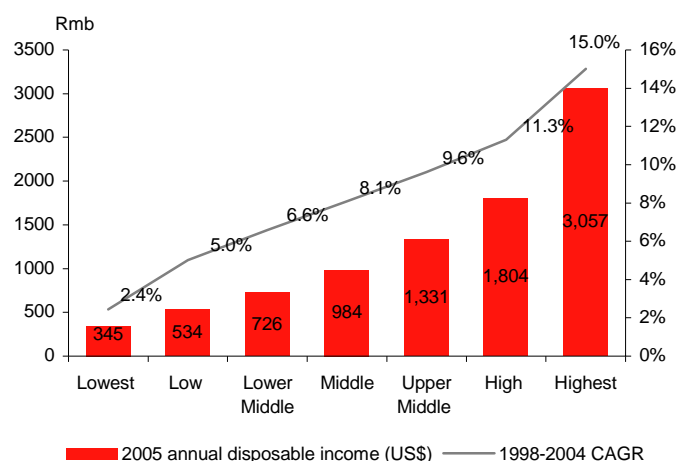


Source: World Bank, August 2006

**Life changes at US\$3,000**

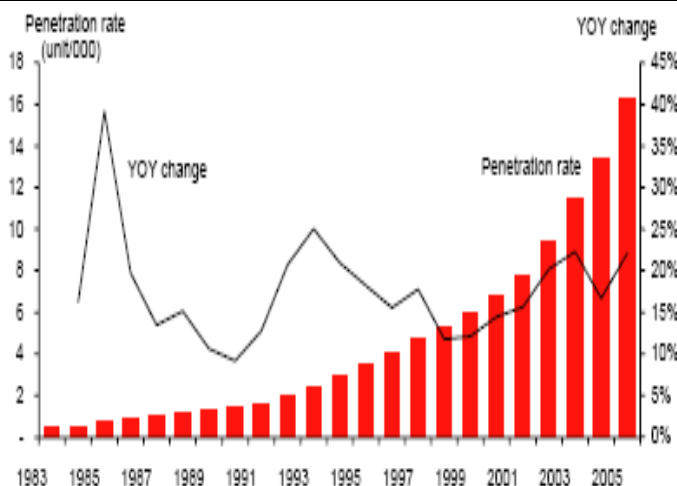
- The combination of rising wealth and changing demographics has provided Generation A with more choices and opportunities, but most importantly, a lift in purchasing power. As personal incomes increase, people tend to consume more, including the basics such as water, sanitation and electricity generation (particularly when coming out of poverty), as well as consumer goods such as cars and refrigerators.
- Moreover, when a region's per capita GDP surpasses US\$3,000, which falls into the World Bank's 'upper middle income' category, there is a sharp increase in income growth in the middle to high income demographic. Spending patterns tend to shift towards a much greater discretionary component at this level of per capita income (see Figure 8).

**Fig 8 Strongest income gains in China's high income group**



Source: Macquarie Research, August 2006

**Fig 9 Chinese car ownership lifts with income growth**



Source: Datastream, CEIC, May 2008

**China leads the way in Generation A**

- China provides a good example of the impact of passing such an income threshold can have on Generation A's consumption patterns. For example, it is said that a key threshold in the acceleration of private vehicle ownership (a key driver of road construction and use) occurs at the US\$5,000 GDP per capita level. China currently sits at less than US\$3,000 on an aggregate basis, but vehicle ownership is rising at 40% per annum (see Figure 9).
- Dietary habits also change. As the size of Generation A expands and populations shift away from subsistence farming, diets and consumption patterns change significantly. Rice consumption per capita tends to collapse and is replaced by surging consumption of sugar (ie soft drinks), vegetable oils (ie processed foods) and meat. For example, meat consumption in China has risen from 5kg/capita to 6kg/capita since 2004 (still below the US at 42kg/capita), as first time access to reliable refrigeration has made meat consumption more desirable.
- Increased purchases of refrigerators, air conditioners, televisions, personal computers and mobile phones are all contributors to an increased demand for electricity. The Energy Information Office in the US projects that energy consumption in the non-OECD region (including China and India) should grow at an average annual rate of 2.6% compared to just 0.8% in the OECD countries until 2030.

**Generation A prepares to take-off**

- We believe the massive potential size of Generation A in the next 15 years ensures that it will be the most influential and powerful generation in the world's history. With per capita GDP in the emerging markets currently still only two-thirds of the magic US\$3,000 mark we think is required for 'consumption take-off', the new mega trends in the global economy can only continue to intensify.
- Generation A's increasing share of global income will irreversibly change world demographics and raise demands for natural resources, infrastructure and use of the environment. For investors, Generation A will create many investment opportunities, particularly in asset classes such as infrastructure, climate change, commodities and consumption-related plays over the long term.

## Important disclosures:

## Recommendation definitions

**Macquarie - Australia/New Zealand**

Outperform – return >5% in excess of benchmark return (>2.5% in excess for listed property trusts)  
 Neutral – return within 5% of benchmark return (within 2.5% for listed property trusts)  
 Underperform – return >5% below benchmark return (>2.5% below for listed property trusts)

**Macquarie - Asia**

Outperform – expected return >+10%  
 Neutral – expected return from -10% to +10%  
 Underperform – expected return <-10%

**Macquarie First South - South Africa**

Outperform – expected return >+10%  
 Neutral – expected return from -10% to +10%  
 Underperform – expected return <-10%

**Macquarie - Canada**

Outperform – return >5% in excess of benchmark return  
 Neutral – return within 5% of benchmark return  
 Underperform – return >5% below benchmark return

**Macquarie - USA**

Outperform (Buy) – return >5% in excess of benchmark return  
 Neutral (Hold) – return within 5% of benchmark return  
 Underperform (Sell) – return >5% below benchmark return

**Recommendations – 12 months**

**Note:** Quant recommendations may differ from Fundamental Analyst recommendations

## Volatility index definition\*

This is calculated from the volatility of historic price movements.

**Very high–highest risk** – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

**High** – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

**Medium** – stock should be expected to move up or down at least 30–40% in a year.

**Low–medium** – stock should be expected to move up or down at least 25–30% in a year.

**Low** – stock should be expected to move up or down at least 15–25% in a year.

\* Applicable to Australian/NZ stocks only

## Financial definitions

All "Adjusted" data items have had the following adjustments made:

Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense  
 Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

**EPS** = adjusted net profit / epowa\*

**ROA** = adjusted ebit / average total assets

**ROA Banks/Insurance** = adjusted net profit / average total assets

**ROE** = adjusted net profit / average shareholders funds

**Gross cashflow** = adjusted net profit + depreciation

\*equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

## Recommendation proportions – For quarter ending 31 December 2007

	AU/NZ	Asia	RSA	USA	CA
Outperform	46.39%	67.98%	73.08%	47.06%	70.00%
Neutral	41.24%	16.78%	21.15%	41.18%	26.92%
Underperform	12.37%	15.24%	5.77%	11.76%	3.08%

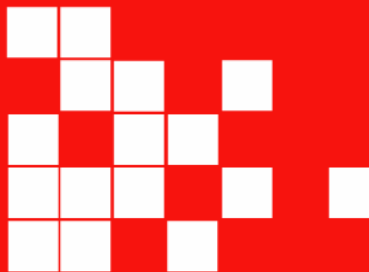
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## Sales

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