CREDIT SUISSE

Issue 02
June 2006

Expert know-how for Credit Suisse investment clients

Global **Investor**

Globalization from a different angle

International intellectual property

Basics Energy, building material, soft commodities
Enrichment Consumption, safety
Switching Microfinance, immigrant banking, new frontiers

Basics
See page 16

In this segment, we focus on investment themes relating to rapid population growth and the movement of people from rural to urban areas, with special attention paid to the sectors that benefit from these trends.

In particular, we cover the following themes in this issue of Global Investor:
Real estate → Higher profitability of oil sand extraction boosts infrastructure and real estate investments in Alberta (Canada).
Infrastructure → Building material companies seeking a foothold in emerging markets.
Soft commodities → The next place to be?

In our last issue, we discussed the following themes:
Infrastructure → Shortage of ports, airports, refineries, power supply, exploration and production of oil, coal and gas.
Real estate in emerging markets → India, Mexico and Turkey.
Supercycle in energy and raw materials → Buying opportunities in oil and commodities.

Enrichment
See page 34

Thanks to their access to the global economy, people's incomes and needs are increasing to the point that they are no longer satisfied with just the basics. The improvement of living standards becomes the main consideration. People in industrial countries generally look for new and innovative products.

In particular, we cover the following themes in this issue of Global Investor:
Key consumption trends → Bipolarization of consumption, health & wellness and emerging markets are the three key trends in the global consumer sector.
Security of life → Safety first in the twenty-first century thanks to RFID tags and ESC braking systems, for example.

In our last issue, we discussed the following themes:
Personal digital media → The increasing success of personalized, on-demand TV, downloadable music and books, and the rapid development of new mobile media and services such as online dating.

Switching
See page 44

Over the last three decades, business has seen revolutionary changes like the switch from manufacturing into low-cost emerging nations and the increasing implementation of lean production processes. Now knowledge services are being outsourced, new global brands are emerging and more countries are joining the ranks of developed nations. Against this backdrop, numerous companies are redeveloping their business models.

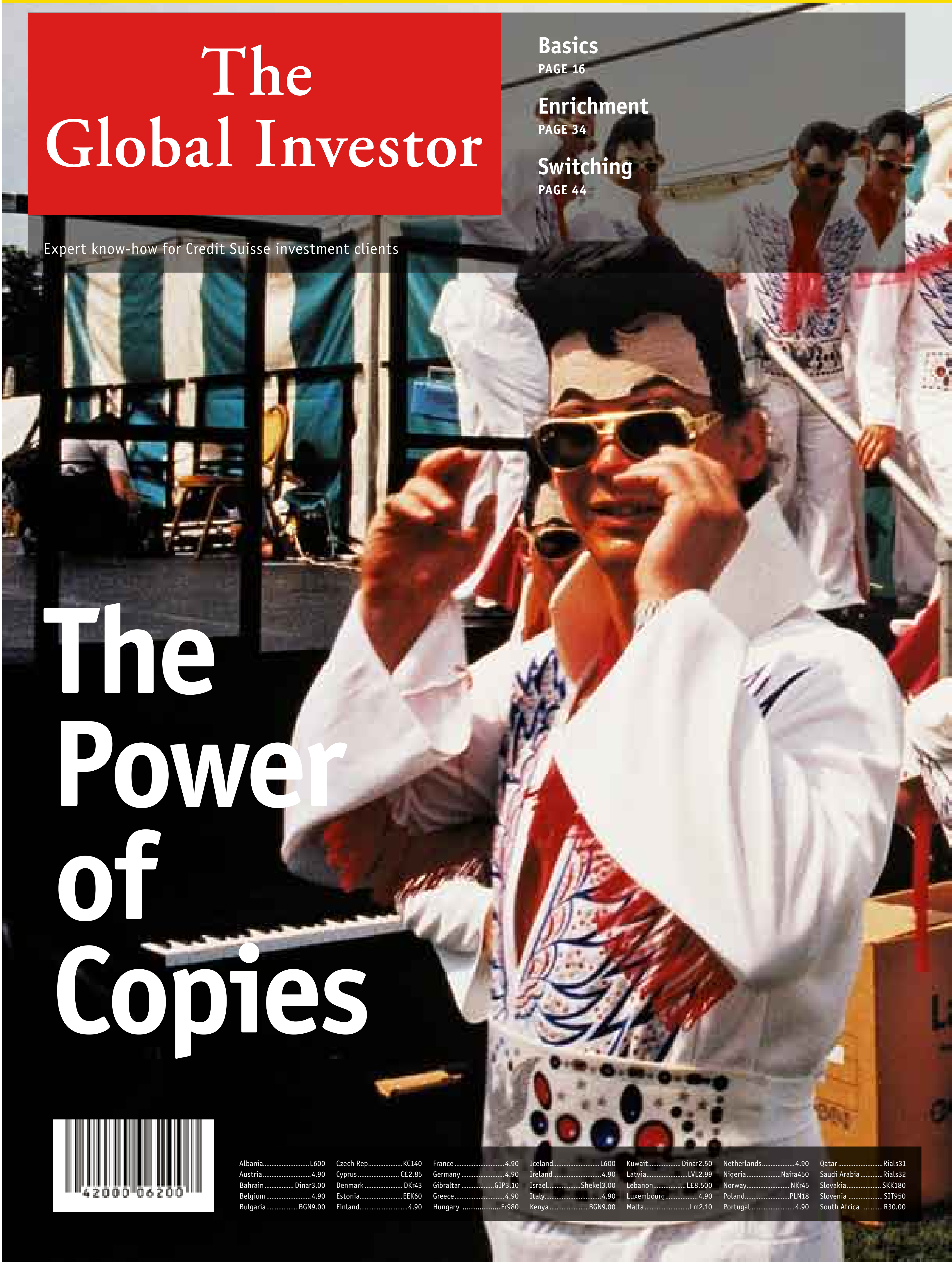
In particular, we cover the following themes in this issue of Global Investor:
Microfinance → Alleviating poverty in Asia. Immigrant banking services.
Emerging market frontiers → Vietnam. Investing in the EU enlargement process.

In our last issue, we discussed the following themes:
Knowledge service outsourcing → Indian companies like Infosys are among the winners.
Emerging market frontiers → African countries benefiting from economic trends, and "developed" status for certain countries like South Korea.

SPECIAL: INTERNATIONAL INTELLECTUAL PROPERTY

The Global Investector

Expert know-how for Credit Suisse investment clients



The Power of Copies

Albania	L600	Czech Rep	KC140	France	4.90	Iceland	L600	Kuwait	Dinar2.50	Netherlands	4.90	Qatar	Rials31
Austria	4.90	Cyprus	C£2.85	Germany	4.90	Ireland	4.90	Latvia	LVL2.99	Nigeria	Naira450	Saudi Arabia	Rials32
Bahrain	Dinar3.00	Denmark	DKr43	Gibraltar	GIP3.10	Israel	Shekel3.00	Lebanon	L£8.500	Norway	NKr45	Slovakia	SKK180
Belgium	4.90	Estonia	EEK60	Greece	4.90	Italy	4.90	Luxembourg	4.90	Poland	PLN18	Slovenia	SIT950
Bulgaria	BGN9.00	Finland	4.90	Hungary	Fr980	Kenya	BGN9.00	Malta	Lm2.10	Portugal	4.90	South Africa	R30.00

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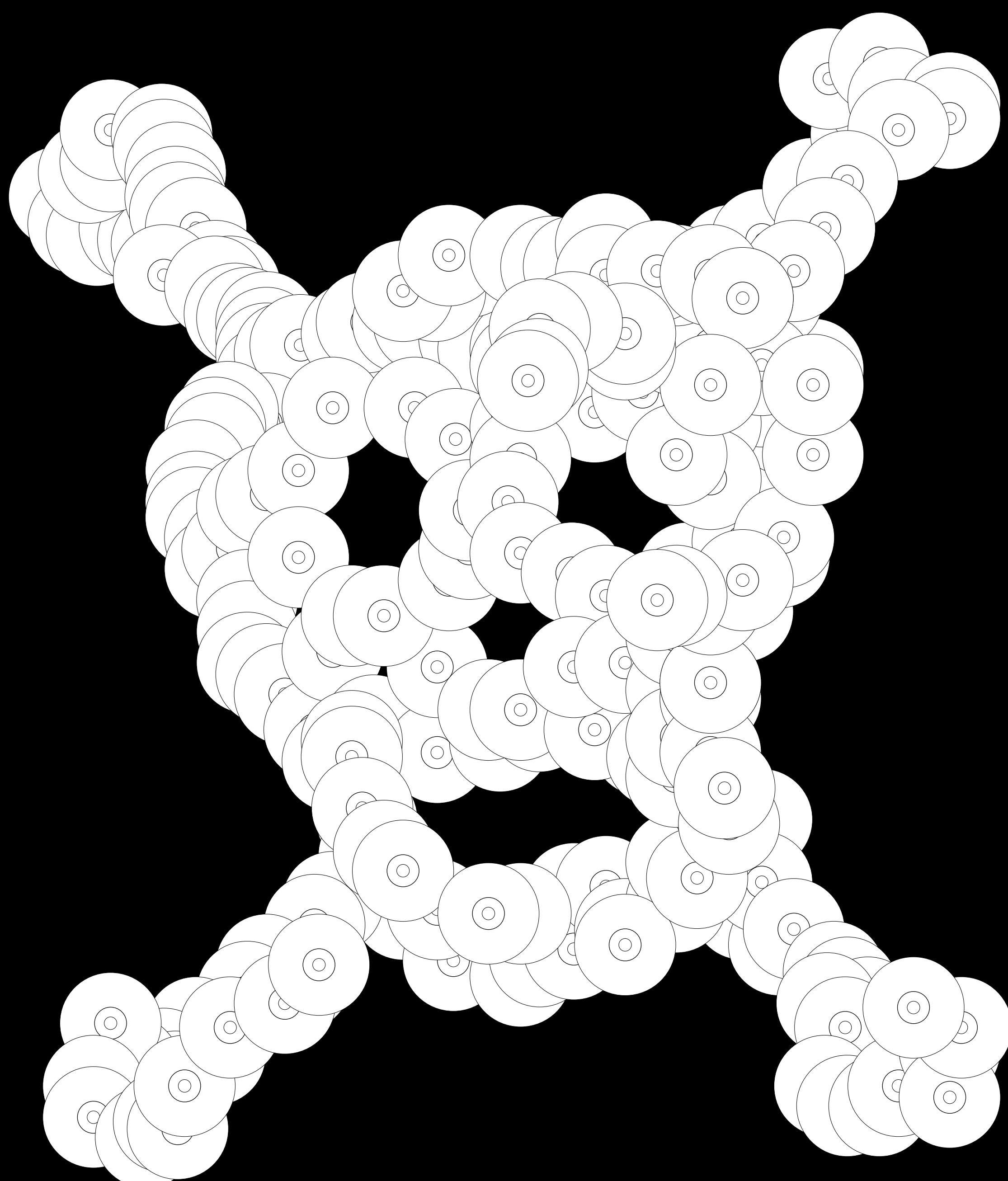
Pirates filch USD 400 billion from their victims!

Modern technologies make illegal copying or imitation of copyrighted or patented products easier. The loot that these pirates walk away with is substantial, but still much less than the losses incurred by the legal owners. The victims of piracy lose at least USD 400 billion (estimates: OECD, Internationale Industrie- und Handelskammer) a year in income.*



*Source: www.ige.ch (Swiss Federal Institute of Intellectual Property/World Economic Forum [WEF], 2004)

Paradise lost – if you can't beat them, join them

The expiration of patent protection (PAT) for a drug basically means a sharp loss in sales for pharmaceutical companies because of generic drugs. This is the case with Eli Lilly's Prozac medication. Pharma companies are adopting new strategies for this reason. For example, Novartis is fast becoming one of the world's largest manufacturers of generic drugs. With its increasing influence on the market for generic drugs, Novartis is well on the way to developing an optimal strategy for brand-name and generic products.

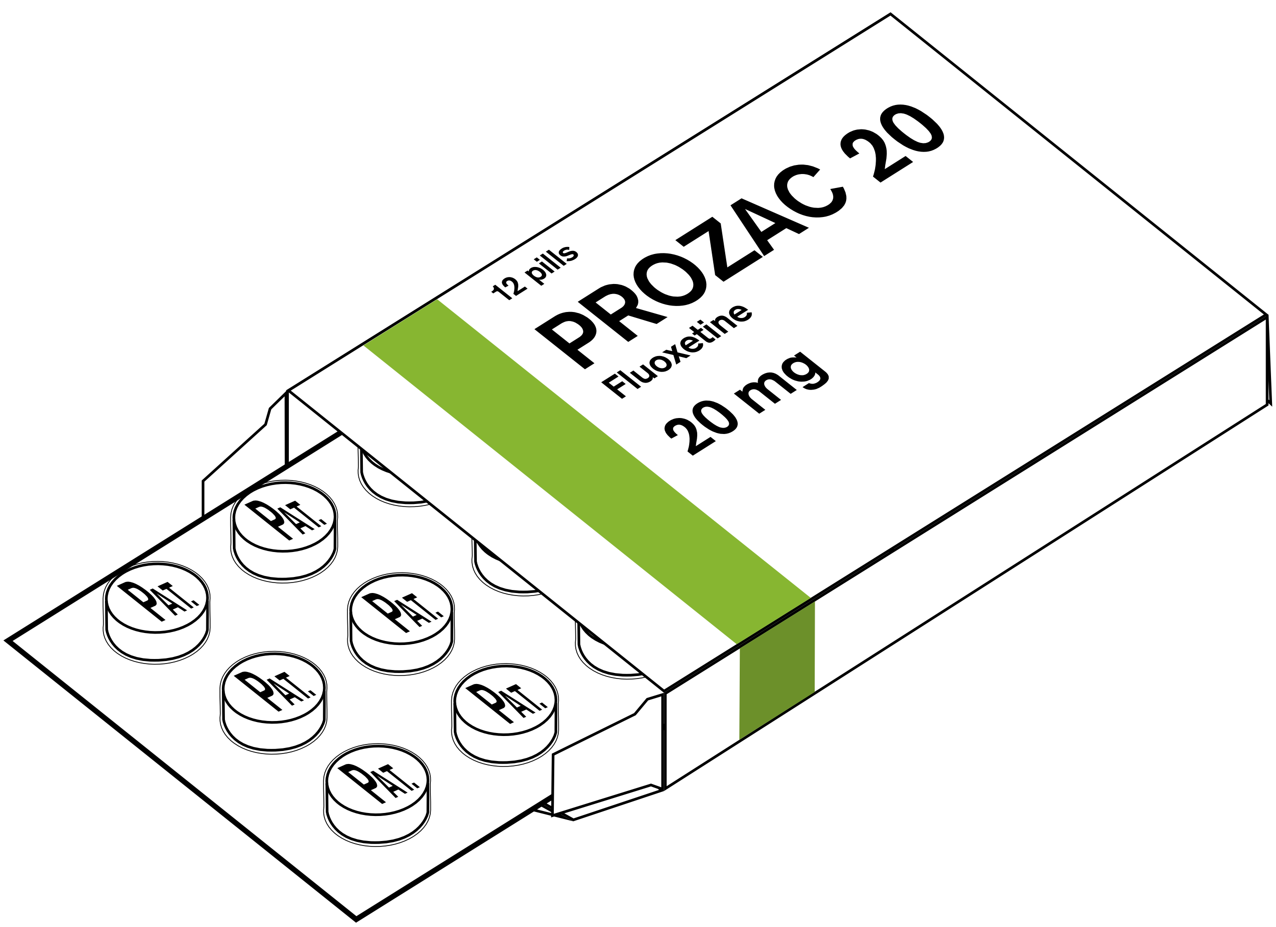


Photo: Gee Ly

Investors have driven many asset prices around the world to full valuations or beyond in their search for opportunities created by globalization. But we believe the scale and scope of demographic, technological and geographic change is so pervasive that, even now, assets can be found whose prices still do not reflect the full extent of what is happening. The astonishing flood of migrants into Spain, many of them from Latin America, has recently pushed the number of registered foreigners to over three million, creating enormous business opportunities. Already reflected in the prices of construction stocks, this development is now being embraced by the Spanish banks. They are using the latest digital technology to create low-cost microbanking for immigrants globally, and we believe their equity prices do not yet reflect this powerful new business model.

Keying off another effect of globalization, investors seeking to benefit from the surging global demand for energy, but concerned that prices of oil-related stocks are already high, can consider investing in real estate in locations linked to the oil boom. For example, the Canadian province of Alberta is benefiting as people move in to exploit the oil sands, which are profitable as long as oil stays above around USD 40 a barrel. We believe there are still investment opportunities in both direct real estate purchases and exposure via REITs. But crucial as energy, real estate and people are for globalization, ultimately it is ideas and innovations that are the source of wealth. In our lead article, we examine the debate about intellectual property rights and argue that, although too little protection can stifle innovation, too much can be bad as well.

This issue of Global Investor aims to give you a number of powerful investment themes for 2006 and into 2007. Looking ahead, we will as usual continue to update you on the progress of the markets via our monthly, weekly and daily publications.

Giles Keating, Head of Global Research

2.06

Apple®

Apple

Apple: “Apple or not apple,” or “Which apple was here first?” If two companies take on the same name and can only be distinguished by their logos, litigation is likely. In this case, The Beatles’ record company Apple Corps emerged from obscurity to defend the band’s heritage of the sixties, and sued Apple Computer for trademark infringement with its iPod and iTunes online music store.

Intellectual fireworks

Ideas, not resources, are the fundamental source of human wealth. A battle has always waged between those who create the ideas and those who want to exploit or imitate those ideas for their own benefit. This results in relentless competition and international tension.

Giles Keating, Head of Global Research, **Jonathan Wilmot,** Chief Global Strategist, Investment Banking

Ideas, not resources, are the fundamental source of human wealth. From the days of stone tools to the deciphering of the human genome, innovation – the ability to create new ideas and turn them into useful technologies – has been the main driver of economic progress affecting most aspects of political, moral and spiritual life in the process[1].

But this intellectual arms race is seldom without conflict. For many centuries, the primary drive was to acquire better military technologies. And in the economic sphere, a battle has always waged between those who have created the ideas and want to be rewarded for that, and those who want to exploit or imitate those ideas for their own benefit. Today, the struggle has many epicenters: China's movie pirates and fakers of fashion labels, the pharma companies and their generic competitors, file-sharing across the Internet, just to name a few.

In this arena, roles can reverse in a dramatic way: "The United States is today's champion of international intellectual property rights (IPRs), but in the nineteenth century 'American publishing was built on the piracy of European works,' and indeed, the US refused to sign the Bern Convention for a hundred years."[2] Apple Inc., the creator of legal music downloads onto its iPod, has been sued by The Beatles' record label Apple for trademark infringement; and pharma giant Novartis is progressively building a world-scale generics business, most recently with its acquisition of Hexal and Eon.

Simple theory

The tension between creators and users arises wherever ideas are costly to generate, but relatively cheap to exploit. Creators want to have legal protection for their output, otherwise why incur the cost of producing it? But once they have produced it, the legal protection gives them an element of monopoly, and like any monopolist, they react by producing less and charging more than in an open, free efficient market.

Film studios and drug companies are only prepared to spend hundreds of millions on blockbuster movies and medicines because they get copyright or patent protection. That allows them to recoup their investment – and generate profit – by charging much more for each copy than the relatively low cost of physically reproducing it. That in turn limits the number of people able to (legally) see the movie or use the drug to far fewer than if there were no intellectual property protection. So once the creation has taken place, IPRs cause inefficiency, but arguably if the IPRs were not enforced by law, the creativity would never have happened because people would not be rewarded for it. This notion has become even more firmly embedded in economists' thinking over the last thirty years and remains the current orthodoxy. Though perennially relevant, it is arguably even more central to innovation and growth in the twenty-first century knowledge-based economy. It is certainly a very live political issue. Would the US trade deficit with China be USD 200 billion if pirated versions of first-world software, movies and much more were not so widely produced by Chinese companies for sale at home and sometimes even abroad?

Fuzzy reality

These days, US politicians prefer the orthodox view, as one might expect. But, among economists, this view is coming under increasing attack since even a cursory observation of the real world shows that the basic theory may be too simple.

In the financial services industry, IPRs are almost unknown, and yet there is a very high degree of innovation. Almost continuously, bankers introduce innovations, incremental or major – examples in the last decade or so include products offering upside equity market exposure with downside protection favored by many private investors or, for pension funds, special assets designed to mirror their liabilities by returning inflation plus a premium linked to corporate credit spreads. Many of these products require substantial development work, which the bankers aim to recoup by being first in the market, which usually allows good sales at a relatively high margin for a while. But gradually, typically over several months rather than several years, competitors copy the product and the margins fall. But, by then, the original innovators should have recouped their development costs, made a profit and moved on to the next innovation.

Inspired by this, some economists have recently argued that, provided there is some cost in reproducing a piece of creative work, or implementing an idea – even if that unit cost is very low – then creativity and innovation can exist without IPRs. This new theory is controversial, but it does help emphasize the intuitively appealing conclusion that the case for IPRs is not absolute – rather, there is a trade-off between weak protection of IPRs, which may stifle creativity, and strong protection, which tends to stifle the propagation of useful ideas and innovations.

These tensions were already well enough understood over two centuries ago, as the US Constitution on the one hand, promises IPRs, but on the other hand, clearly states they must be restricted: "To promote the progress of science and useful arts, by securing for *limited* times to authors and inventors the exclusive right to their respective writings and discoveries..."[3] (our italics).

The body of intellectual property law that has built up since then in national and international law represents an uneasy compromise, and contains many more or less arbitrary variations. Patents have a relatively short duration (typically 14 or 20 years) while the term of copyright protection after an author's death has progressively been extended over the last 30 years by the US Congress. And trademarks are protected indefinitely. Internationally, following the path trailblazed by the Bern Convention of 1886, the TRIPs accord (Agreement on Trade-Related Aspects of Intellectual Property Rights), signed as part of the Uruguay Round of trade liberalization talks in the late 1980s, represented a major step forward for the proponents of strong rights for the creators of intellectual property. China became a signatory to this as part of its accession to the WTO (World Trade Organization) in 2001, giving the US Administration and companies a powerful new tool to fight for protection of copyright and trademarks.

Alongside international treaties and statute law, the role of case law has also always been critical, and looks set to become even more so given the ease of reproduction and distribution of ideas and content via the Internet. Examples of actual or potential litigation abound, a typical example centering on Google's plan to create a global digital library, which may well be challenged by some of the major publishers.

Positive discrimination

Important as the legal framework is, market forces – and public pressure for corporate social responsibility – can help resolve the tension between the need to incentivize creativity and the need to optimize propagation. Major pharma companies have responded to global criticism about the high cost of retrovirals for treating HIV/AIDS, by slashing the cost of these treatments in emerging nations down close to the marginal cost. This is far below the prices charged in developed countries, which are set at a high level to allow R&D costs to be recouped.

Although, in this case, the companies were responding primarily to public pressure, economic theory suggests that price discrimination like this can maximize profits. This looks to be the motive for the recent decision by legitimate DVD distributors in China to cut their prices substantially, using market forces to drive out the pirates. This strategy only works if there is little "seepage" of the products from low-priced markets to high-priced ones, and for DVDs, the distributors rely on the region-coding system, which prevents most players from operating with discs from another part of the world. Moreover, the theory suggests that such price discrimination, if taken far enough, can actually raise output back up to the point where it would have been if no monopoly had existed. So it can play a major role in resolving the tension between incentivizing creativity and optimizing propagation.

Relentless competition

But there is more. No neat and tractable theory of monopolistic competition exists today, but many industries feature intense and often dynamic rivalry between a few really large firms, or a large set of firms ready to challenge a dominant market position (Apple in the music download area, Google in search, Ebay in online auctions), should the market leader fall behind in technological innovation or become too greedy in its pricing. Some economists even argue that this may be the ideal environment for stimulating innovation: the possibility of earning large monopoly profits, even for a short time, leading to relentless efforts to develop and market better products. Typically, this situation will lead to a very skewed market structure; with a small number of very large firms surrounded by a seething mass of innovative minnows and dependent suppliers. Provided one firm never becomes so large, rich and dominant as to suppress all possible challenges to its own technology and market leadership, this type of competition can drive rapid growth and resolve many of the tensions between creators and users of economically useful ideas. At first sight, Microsoft's long-term dominance of computer operating systems seems to be a counterexample. It's worth noting first that this hegemony may have had some unintended social benefit, since it encouraged standardization of software applications, thus speeding up the spread of personal computers. And, by now, the open source software movement has helped produce a strong challenge to the dominance of Windows in the form of Linux. Microsoft still makes huge copyright-protected profits, but must now work much harder to retain its customers and market position.

More generally, open source software – where the software is provided free and together with the underlying code for others to learn from, refine and improve it – is a major puzzle for the standard economic theory. OpenOffice.org, offering a challenge to Microsoft's Office suite, is a leading example. There is a vast amount of such free software around, much of it of very high quality. Indeed, it seems that open source products are frequently much better than their IPR-protected rivals. While some of the developers may earn money from providing support for such systems, or acquiring reputations that get them top jobs in traditional firms, it is not clear whether that is the norm, or even the primary motivation. Be that as it may, the movement does help to push the economy in the direction of more socially optimal outcomes.

Realpolitik

The struggle between those who want strong IPRs to encourage creativity, and those who want weak ones to encourage propagation, is most obvious in the current tension between the wealthy nations, with their enormous body of existing intellectual property, and emerging countries with their vast populations that can use that creative base to boost their living standards rapidly. This is why IPRs have been such a flashpoint in already-strained international trade relations, especially between China and the USA. Just in the last few weeks, the Chinese government's failure to effectively enforce its antipiracy laws has been cited frequently by US officials and congressmen, as they discuss a new round of trade bills, in which much of the content is aimed squarely at China. This being a (midterm) election year in the USA, things may well get worse before they get better. But over time, this particular source of tension

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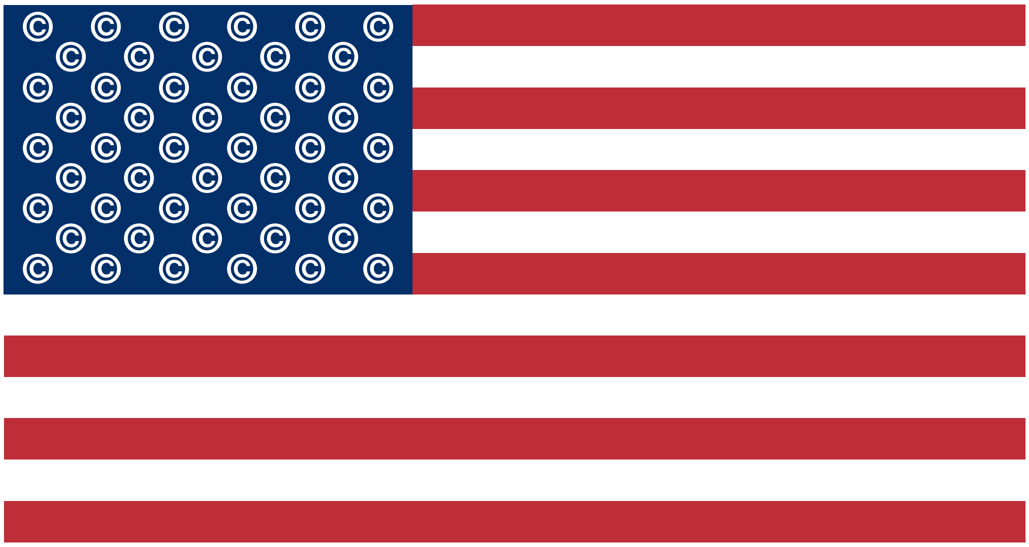


USA: A change of face. While the USA is today's biggest defender of "international intellectual property rights" (IPRs) and condemns the piracy that takes place in the emerging market countries (especially China), it was a major infringer of intellectual property rights in the nineteenth century, as US publishers reproduced copyrighted material from Europe.

should decline rather than increase. As hinted earlier, one reason is that more and more effective use of price discrimination will allow some developed-economy companies to charge low prices in the emerging nations, thus minimizing the opportunities for copycats. It is not just DVDs: another excellent example is given by Procter and Gamble, which has developed a completely different range of household products for many lower-income emerging markets, not only typically at lower prices than charged in the rich nations, but also catering to local tastes in areas such as fragrances.

Reason for optimism

But the main ground for longer-term optimism is that, as emerging nations start to develop their own intellectual property and urban incomes grow strongly, a tipping point approaches at which it becomes in their interest to support stronger IPRs. In the late nineteenth century, Germany was a major center for literary piracy, but its own economy and output of intellectual property were growing rapidly, and German authors found themselves suffering at the hands of pirate publishers in other countries. The result was the Bern Convention of 1886, under which the signatories respected one another's copyrights, representing a kind of ceasefire in the intellectual property wars, at least within Europe. The US refused to sign because with relatively little of its own accumulated intellectual property, it was still benefiting more from pirating from other nations than it was vulnerable in respect of its own material. Gradually, as the balance shifted, the US signed bilateral copyright deals with many nations, although it did not become a formal signatory of the Bern Convention until more than a century later. India, which has recently tightened up its rules on the copying of pharmaceuticals, may already have passed the tipping point. The new rules appear directly linked to the gradual transformation of its own major pharma companies, Ranbaxy and Dr Reddy's. In the past, these were pure generics producers, but have now begun to conduct primary research in their own right. China is changing too, as the current thirst of local companies to build their own R&D facilities and move up the value chain attests. This trend suggests a tipping point could be reached in a matter of years rather than decades.

Even then, international tension over IPRs will not disappear; it will simply evolve in new directions. As China, India and others build product design, branding and marketing of their own, the competitive threat for major western companies will shift from the risk of having their products and trademarks ripped off, to the risk of facing strong new competitors who challenge them on equal terms. Western firms will want to be sure that these new competitors are not being unfairly subsidized by foreign governments. They will also respond by shifting even more of their R&D to lower-cost countries, potentially boosting profits, but also putting the same kind of downward pressure on wages of skilled workers in the rich nations that unskilled workers already face. For their part, local entrepreneurs in emerging countries will need venture capital expertise, much of which may come from the West, and will often be keen to sell their businesses to foreign firms with deep pockets and experience in bringing new products to market. So, through a number of routes, there will be opportunities as well as risks for the developed world.

The optimistic view is that the opportunities will outweigh the risks. But optimism is probably realistic in this case. As the emerging world strives to catch up with the West, self-interest will dictate stronger protection of intellectual capital and the economically useful ideas it generates. That, in turn, will help recreate on a global scale the messy mixture of IPRs, relentless competition and cooperation that currently exists in most developed countries. And that will help to drive the innovation on which our mutual prosperity depends.

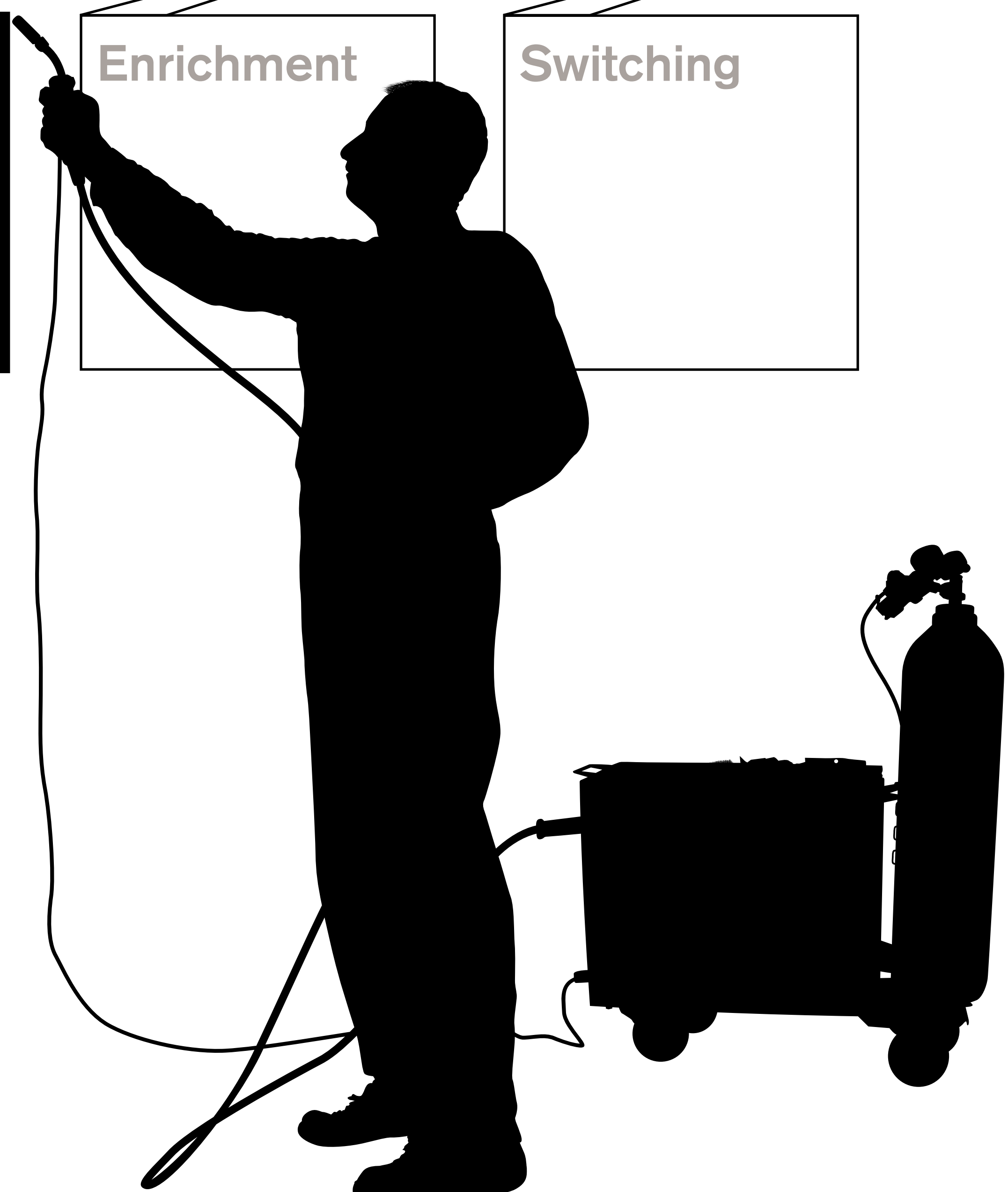
For investors, we see three key conclusions. First, a long-term slide to global protectionism based on IPR battles is unlikely. So, although short-term market dips are certainly possible in response to current protectionism in both the USA and Europe, ultimately those dips are likely to be buying opportunities. Second, as China and India tailor their adherence to international IPR norms to a pace that suits the development of local companies, we can expect a handful of those firms to emerge successfully as global giants over the next decade, as happened with Japan in the 1960s and 1970s. Third, in a world where the protection afforded by IPRs can be regarded as transitory at best, less because of piracy and more because legitimate competitors develop radical new approaches, company valuations supported by annuity-like income streams from past inventions are likely to be sound only if that cash flow is used to aggressively develop bold new innovations. ■

[1] Note that "innovation" covers things like legal systems, joint stock companies and assembly-line production, as well as things like gunpowder and the internal combustion engine. See also the United Nations Human Development Report 2001 for evidence of the tight correlation between their index of human development (based on GDP per capita, educational attainment and life expectancy) and levels of technology achievement, both across time and countries.
[2] Peter Drahos, John Braithwaite, Information Feudalism, Earthscan, 2002, p. 32.
[3] Constitution of the United States, Article 1, Section 8.

Basics

Enrichment

Switching



Oil sands and real estate investments in Alberta

The economy is flourishing in the resource-rich Canadian province of Alberta, thanks to the sustained high level of energy prices. A substantial demand overhang is pushing up the value of retail and office property and leading to a sustained upswing in the housing market. Looking ahead, the outlook for Alberta's economy is still rosy, so property market demand is likely to remain firm.

Zoltan Szelyes, Global Real Estate Analyst, **Tobias Merath,** Commodity Analyst

The economy in the Canadian province of Alberta is currently enjoying a period of rapid growth. High employment growth and high wage growth are a reflection of the region's export dynamics. Alberta's GDP expanded at a fast 4.3% clip in 2005 and this brisk economic activity has also buoyed the local property market; the level of unmet demand for office and retail space is high and the housing market is thriving as well. This regional economic boom can be traced to the energy sector and its significance within Alberta's economy. It has clearly benefited from the steep rise in energy prices. But it is not the only sector that has been buoyed by record-high energy prices; thanks to spill-over effects on other economic sectors, the entire region is riding on the coattails of the energy-led boom.

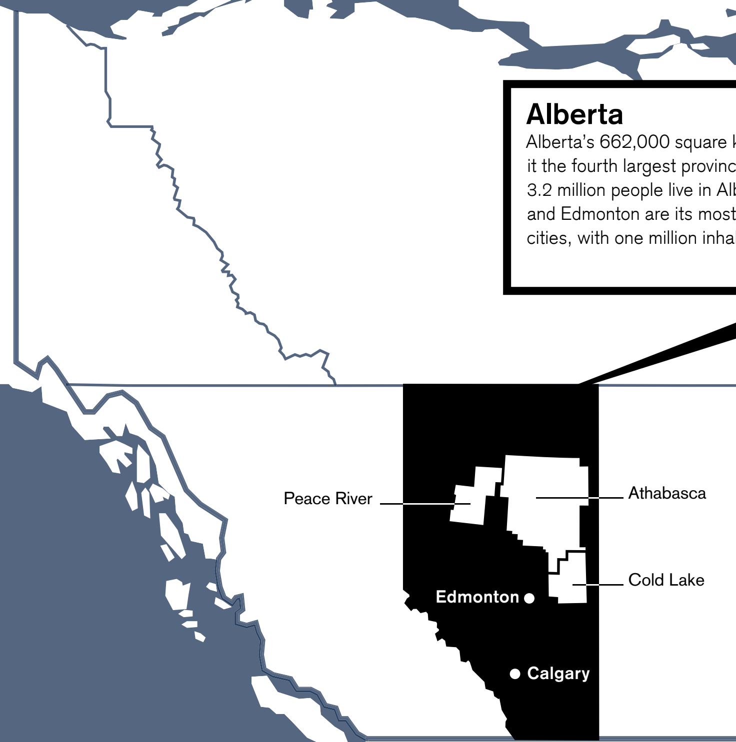
Canada is the world's seventh largest producer of crude oil with a daily output of more than two million barrels. It is the world's third largest producer of natural gas after Russia and the USA, with an annual output of more than 6.5 trillion cubic feet. More than half of Canada's natural gas production is exported to the USA. More than 95% of Canada's crude oil reserves and 80% of its natural gas reserves are in the province of Alberta. Consequently, Alberta's economy is heavily dependent on the energy industry. Approximately 25% of Alberta's GDP stems from the energy sector, and roughly every sixth person in the working population is employed in this sector. Alberta's petroleum reserves are the second largest in the world after Saudi Arabia. What's special about Alberta's oil resources is that well over 90% of its crude oil reserves are in the form of so-called oil sands. Oil sands are a mixture of clay, sand, water and bitumen. Bitumen can be processed into synthetic crude oil. Almost one million barrels of oil a day were produced from oil sands in Canada in 2005, or about half of the country's entire output. At present there are two different methods for making crude oil from oil sands. One involves surface mining or open-pit techniques. After mining, the oil sand is processed with hot water, producing liquid bitumen that can be skimmed off from the resulting slurry. Since liquid bitumen is much more viscous or thicker than crude oil, it must be mixed with conventional crude oil or chemically diluted to make it transportable by pipelines. However, 80% of Alberta's oil sands deposits are buried so deep that surface mining is no longer practical.

These deposits can nevertheless be recovered using so-called in situ methods. This involves pumping hot steam deep underground through one pipe to loosen the surrounding bitumen and then drawing the liquid bitumen and water mixture to the surface through another pipe.

Vast amounts of infrastructure needed

Roads, railways and machinery (trucks and earth-moving equipment for example) are needed for surface mining techniques. The in situ

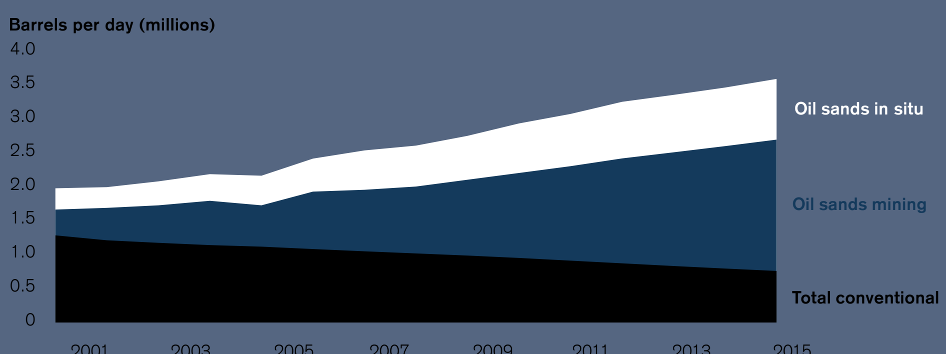
Alberta
Alberta's 662,000 square kilometers make it the fourth largest province in Canada. 3.2 million people live in Alberta. Calgary and Edmonton are its most important cities, with one million inhabitants each. ←



Natural gas
Similar to crude oil, most of Canada's natural gas deposits are found in Alberta. The province is home to over 80% of Canadian gas reserves. Alberta produces over 16 billion cubic feet of natural gas per day, a large part of which is exported to the USA. ←

Residential construction boom
The province of Alberta is in the midst of a residential construction boom, with 40,000 new residences (homes and apartments) under construction in 2005. This corresponds to a year-on-year increase of 13%. In 2005, prices of new homes rose by 6.9% in Calgary and 6.4% in Edmonton, compared to the year before. ←

Figure 1: Production of crude oil in Canada
The production of crude oil from oil sands is expected to surpass the 1 million barrel a day mark for the first time this year and to continue rising to approximately 2.7 million barrels of oil a day by the year 2015.



Source: Canadian Association of Petroleum Producers (CAPP) method is very energy and water intensive. An abundant supply of water must be available close to wherever in situ techniques are being used. Large quantities of natural gas are also required for the hot water processing stages. Using today's technologies 0.85 million cubic feet of gas are needed to produce one barrel of crude oil. In view of these high costs, it isn't economical to produce crude oil from oil sands unless WTI crude is trading at USD 30–40 a barrel or more. Recent long-term projections of the price of oil now range from USD 40 to 50 a barrel, which makes oil sands projects increasingly attractive. Moreover, the recovery and processing of oil sands in Canada is subject to much less political risk than in other countries of the world that have large oil sands deposits, like Venezuela for example. This is evident in long-term forecasts of Alberta's production output. The production of crude oil from oil sands is expected to surpass the 1 million barrel a day mark for the first time this year and to continue rising to approximately 2.7 million barrels of oil a day by the year 2015. At the same time the conventional production of crude oil is likely to decline significantly as existing reserves are depleted. It is estimated that Canadian oil production will be ramped up to about 3.5 million barrels a day in the year 2015 – and oil sands are expected to account for as much as 80% of the entire output **(see figure 1)**. Since most of the oil sands deposits are inaccessible using strip mining methods, much of the additional production will involve in situ techniques. In order to actually achieve this increase in production, significant investments will have to be undertaken. The Alberta Department of Energy has projected that as much as CAD 5 billion will be invested annually over the next few years just for projects concerning the direct extraction of oil. Most of these investment projects will be situated in the Athabasca region of Alberta, which is also where the largest oil sands deposits are located.

Substantial investments must be made today in order to make full use of the potential of these energy reserves in the future. Besides the investment projects in the energy sector, infrastructure, electricity and water supply systems must be improved and adjustments must be made in the manufacturing sector to ensure optimal use of the potential offered by Alberta's petroleum resources. The corresponding investments are in fact being made. As shown in **table 1**, construction activity in Alberta is at a high level with more than one thousand projects with a price tag of at least CAD 2 million each currently underway. The oil sands projects are the largest in terms of investment volume; in addition, road infrastructure is being improved, power and water supply systems are being upgraded, and schools and hospitals are under construction. It is important for Alberta to maintain its ability to attract workers from other regions of North America. Employment in Alberta did grow at a fast 3.5% pace in 2005 compared to the previous year, but such growth is nevertheless being hampered by the lack of qualified workers. More than 40% of Alberta's businesses in the manufacturing sector complained about a shortage of skilled workers at the end of 2005. (As a comparison, the corresponding percentages were 5% in Ontario and 15% in British Columbia.) This labor shortage is driving up wages (average increase of +9.4% in 2005 compared to 2004) and weekly working hours, despite the steady flow of workers migrating to Alberta from other Canadian provinces and from other countries. Alberta's population grew by 2% in 2005. More than half of this increase was due to migration. Considering the attractive employment opportunities Alberta offers, we expect this migration trend to persist going forward.

Table 1 Source: Alberta Economic Development, Credit Suisse

Investments in infrastructure

Besides the investment projects in the energy sector, infrastructure, electricity and water supply systems must be improved and adjustments must be made in the manufacturing sector.

Sector	Number of projects costing more than CAD 2m	Value in CAD millions
Agriculture and forestry	33	1,519.0
Chemicals and petrochemicals	8	609.0
Commercial real estate	117	4,732.0
Infrastructure	346	11,440.8
Institutional	214	7,808.0
Manufacturing and mining	9	345.0
Oil and gas	25	5,030.0
Oil sand	48	73,804.0
Other industrial	30	509.0
Pipelines	45	5,439.1
Power	21	4,162.5
Residential	97	1,792.3
Tourism/recreational	155	5,898.0
Total	1,148	123,088.7

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Positive population and employment growth have led to greater demand for housing. **Figure 2** shows the increase in housing starts: construction started on approximately 41,000 new homes during the course of 2005, which represents an average increase of about 12% over the previous year. The prices for residential property in Alberta rose by 7% to 9% last year as well, depending on the type of housing.

Compared to the rest of Canada, where housing prices have increased by an average of 6%, the cost of residential property in Alberta increased at a faster than average pace but, in contrast to many regional property markets in the U.S. (last year housing prices rose by more than 20% in California and Florida, for instance), Alberta's housing market is not overheating. What's more, the average prices for condominiums and single-family homes in Alberta are still lower than in the neighboring provinces of British Columbia and Ontario. Due to the rise in interest rates, however, housing has become less affordable for Albertans despite the high wage growth. That said, the percentage share of floating-rate mortgages is lower in Canada than in most other countries, so Canadian homeowners are generally less exposed to rising interest rates. The percentage of variable-rate mortgages of total mortgage lending in Canada is 25% in comparison to the USA (35%) or Europe, where in most countries the share of variable-rate mortgages is above 60%). We expect the Canadian residential property market to remain firm in 2006 because population growth and employment growth should remain strong in the year ahead.

High rental demand for retail and office space

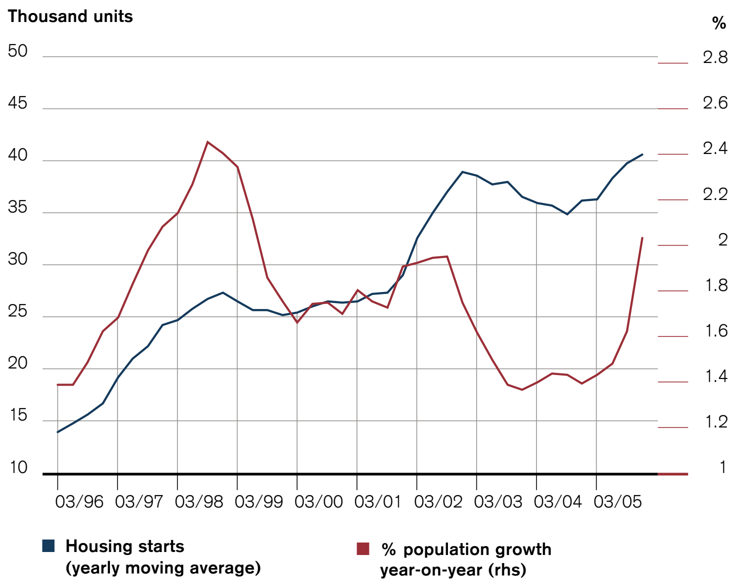
The commercial property market has also benefited from Alberta's booming economic growth. Demand for retail and office space in Calgary from both buyers and renters is high. Immigration flows into Alberta and high wage growth have increased the demand for shopping venues. Vacant retail space declined during the course of 2005 and represented less than 3% of total available space at year-end 2005. Declining vacancy rates and the ambitious expansion plans of Calgary retailers have exerted upward pressure on rental rates. There has been an only moderate increase in planned construction projects, however, which to some extent is because the required approval procedure takes so long (about six months) and construction costs have risen. Consequently, both the demand overhang and the upward trend in rental rates are likely to persist in 2006. Retail floor space in downtown Calgary, where the vacancy rate is still the highest (6% plus), is likely to experience particularly strong demand in 2006.

Excess demand and the uptrend in rents are even more conspicuous in the office market in Calgary. As shown in **figure 3**, the vacancy rate in this market segment was about 2% at the end of 2005, whereas it had stood at more than 13% only a few years earlier. Calgary's office rental market thus has one of the lowest vacancy rates in a global comparison of cities with a similar size. This shortage of space has exerted considerable upward pressure on rental rates for prime locations; rental rates rose by about 8% in 2005. Many companies have responded to the shortage of space by expanding in the suburbs surrounding Calgary where office space is more plentiful. Forecasts of future supply suggest this situation is not about to ease either: about 1.5 million square feet of office space will be added in 2006, but is pre-leased for more than 70% of this new space. Since demand is expected to remain high, office rents are likely to continue rising in 2006.

Figure 2 Source: Datastream, Credit Suisse

Population growth and residential construction activity

Positive population and employment growth have led to a greater demand for residential homes, as indicated by the trend in housing starts in the chart below.



Beside Calgary, Edmonton's real estate markets should also benefit from the oil boom due to Edmonton's proximity to the oil sand fields. While downtown office vacancies in Edmonton are higher than in Calgary, they dropped in the course of the year from 8.6% to 7.1%. The prospects for the next years are good, with expected rental growth and further drops in vacancies.

Investment in commercial property in Calgary and Edmonton

The real estate investment market in Calgary was very active in 2005. More than CAD 1.85 billion worth of property changed hands in 2005, on the heels of the record year in 2004 when transaction volumes reached CAD 1.95 billion. Demand for investment objects was high while supply was relatively low, so selling prices once again rose at a faster pace than rental rates. As a result, property yields continued to shrink in 2005; they were still above 9% as recently as in 2003 but, based on year-end 2005 data, they now range between 6.5% and 7.25%, depending on the type of property and its location. Investment sentiment is still strong, but in view of the substantial decline in yields, we think that selling prices will rise at about the same pace as rental rates in 2006, and that property yields will be stable or slightly lower. Real estate investors can still benefit from the appreciation in property value since we expect a stable increase in rental rates.

Commercial real estate markets in Edmonton have also seen a good year, with a sales volume around CAD 700 million. This has also placed pressure on yields, as supply could not meet the high demand. However yields in Edmonton are still higher than in Calgary and range between 7% and 8%. We expect investors' interest to be strong again in 2006, with further downward pressure on yields. Real estate investors should benefit from further capital growth in Edmonton.

Investors who want to gain exposure to the potential in these regions can either invest directly in energy companies or invest in the real estate market. Companies in the energy sector, with the largest exposure to the oil sand projects in Alberta are Suncor Energy Inc., Canadian National Resources, and Husky Energy Inc.

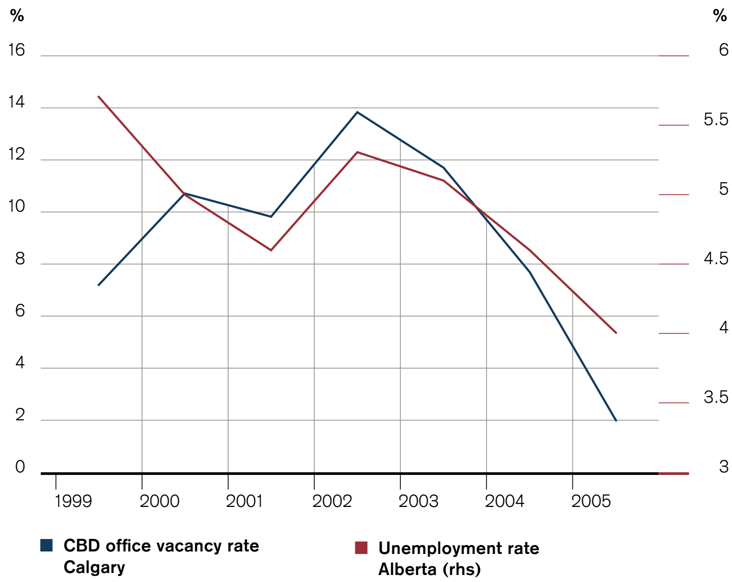
Investors can either invest directly or indirectly in the real estate market. The high level of transparency of the Canadian commercial real estate market also opens the way for direct investments. However there are high entry barriers for commercial real estate. Sales prices for commercial objects start at single-digit million amounts but – depending on the size of the object – could reach high double-digit million amounts.

Investors can also access Alberta's real estate market through indirect investment vehicles, choosing between closed-end, open-end real estate funds or REITs. There are open-end funds that also have an exposure to the office sector in Alberta, and closed-end funds that specifically target this region. Canada has also passed REIT legislation, modeled after US REITs. RioCan Real Estate Investment Trust, Canadian Real Estate Investment Trust, and Collaway Real Estate Trust offer exposure to commercial property in the province of Alberta through their Canada-wide portfolios. These trusts' share of the investments in Alberta ranges from around 10% to 20%. However the performance of Alberta's real estate markets will also significantly impact their earnings and we also see potential for the real estate market in other provinces such as Ontario (Toronto). ■

Figure 3 Source: Colliers, Datastream, Credit Suisse

Alberta unemployment and office vacancies in Calgary

The commercial property market has also benefited from Alberta's booming economic growth. Demand for retail and office space in Calgary from both buyers and renters is high.

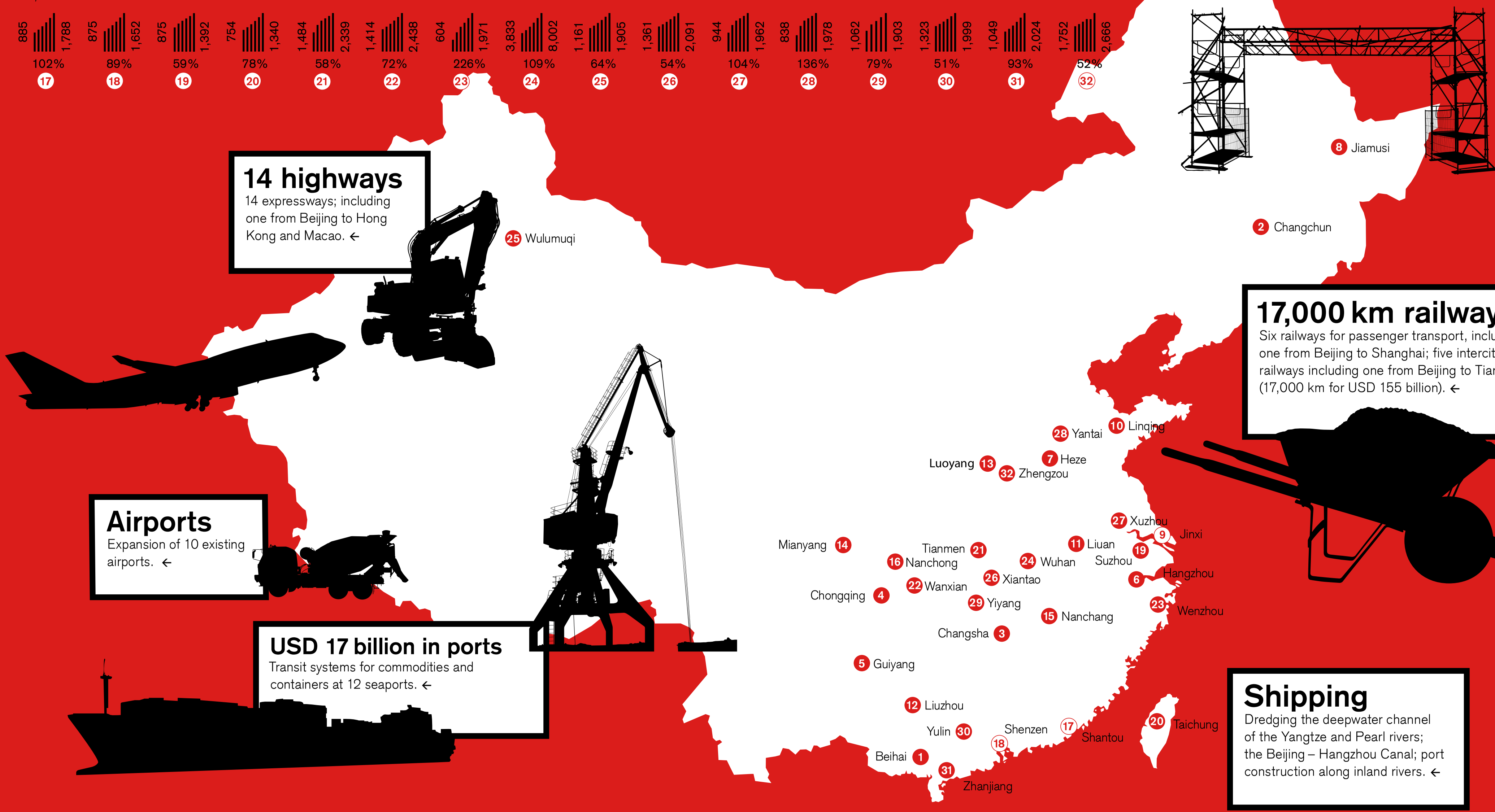


Growth in China

China has the fastest growing construction industry in the world and currently accounts for approximately a quarter of the world's building projects. A second wave of Chinese urbanization (second-tier cities not along the coast) is in the works.

Growth > Cities with a population growth of more than 50 % in recent years (1990–2015).

1	230	3,742	1,527%
2	2,192	3,582	63%
3	1,329	2,713	104%
4	3,123	5,758	84%
5	1,665	2,858	72%
6	1,476	2,360	60%
7	1,200	2,439	103%
8	660	1,324	101%
9	1,350	2,144	59%
10	696	1,288	85%
11	1,481	2,473	67%
12	751	1,272	69%
13	1,202	1,927	60%
14	876	1,429	63%
15	1,262	2,020	60%
16	619	1,243	101%
17	885	1,788	102%
18	875	1,652	89%
19	875	1,392	59%
20	754	1,340	78%
21	1,484	2,339	58%
22	1,414	2,438	72%
23	604	1,971	226%
24	3,833	8,002	109%
25	1,161	1,905	64%
26	1,361	2,091	54%
27	944	1,962	104%
28	838	1,978	136%
29	1,062	1,903	79%
30	1,323	1,999	51%
31	1,049	2,024	93%
32	1,752	2,666	52%



14 highways
14 expressways; including one from Beijing to Hong Kong and Macao. ←

Airports
Expansion of 10 existing airports. ←

USD 17 billion in ports
Transit systems for commodities and containers at 12 seaports. ←

17,000 km railways
Six railways for passenger transport, including one from Beijing to Shanghai; five intercity railways including one from Beijing to Tianjin (17,000 km for USD 155 billion). ←

Shipping
Dredging the deepwater channel of the Yangtze and Pearl rivers; the Beijing – Hangzhou Canal; port construction along inland rivers. ←

Building material companies seeking foothold in emerging markets

At this stage in the development of the emerging markets, the acceleration of urbanization in China and India is exceeding the normal supply and demand cycles for infrastructure and housing needs, as happens where industrialization is coupled with wealth generation for a larger group of people. As a consequence, building material companies are increasingly trying to gain a foothold in the emerging markets.

Thomas Rauch, Equity Strategist

The new situation is that urbanization is becoming synchronized on a worldwide basis. General Electric predicts that developing-market infrastructure spending could amount to USD 3 trillion in the next 10 years. We think there is evidence that one quarter or USD 750 billion of this amount will be spent under current conditions within the next three years in major emerging markets like Brazil, Mexico, China, India, Indonesia, South Africa and the Gulf region. We identify two major risks for a significant growth slowdown: politics or a bear market in commodity prices (Russia, Brazil). Both would inhibit further government spending.

The World Bank reports on infrastructure in the developing world, and outlines basic infrastructure indicators **(see table 1)**. As the report outlines, every region has particular needs and risks. The most common point for all the global emerging markets is that more money needs to be spent on infrastructure. The main drivers causing these economies to grow above their historic levels within current extended economic expansion actually are: 1) globalization and liberalization, 2) years of underinvestment, 3) acceleration of urbanization, 4) improved fiscal positions, and 5) price increases in basic materials.

A powerful combination of factors supports and justifies an above-consensus view on pan-Asian domestic demand and emerging markets in general. While Brazil and Russia are supported by the price development in basic resources (basic metals, oil, gas), China and India are benefiting from overall economic transformation based on the ongoing industrialization and urbanization of the rural population **(see figures 1 and 2)**.

According to the forecast, the urbanization trend in China is unlikely to slow much before 2015 (expected growth rate 2005–2010: +14.7%; 2010–2015: +12.8%) and is even expected to accelerate in India in the near future (2005–2010: 12.9%; 2010–2015: 13.5%). Emerging markets are actually the major beneficiaries of increased capital expenditure spending, which is expected to grow at an even higher rate during 2006, after most global operating companies

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report healthy balance sheets in 2005 and are expected to gear up (annual change in year-to-date fixed asset investments in 2006: +26.6%; industrial production: +20.5%). In addition, we estimate, for example, the value of Chinese consumption at USD 1.057 billion in 2005 (valued at the average annual RMB exchange rate of 8.19/USD). This is 48% higher in real terms than our 2004 estimate. China's household consumption is so far only 3.8% of the global total (up 2.9% from 2004).

The increasing spending power accents the need for infrastructure improvements, based simply on the fact that private consumption (cars, water pipes, infrastructure for housing, etc.) ultimately depends to a high degree on public infrastructure. One of the most accurate measures of economic and infrastructure development is the consumption of basic materials, in particular the consumption of cement. After 2002, the acceleration of cement demand increased sharply **(see figure 5)**. In addition, Asia Pacific ex China and India stands in clear contrast to Asia Pacific as a whole, which underpins the importance of the role of India and China.

Figure 3 shows cement consumption over the last 15 years (millions of tons) in major regions, and **figure 4** shows the historic development of regional cement consumption since 1910 in regional economies, indicating increases in their infrastructure spending. The process reaches a self-energizing phase at a certain point, mainly driven by rising incomes, followed by increasing private consumption and the transformation of the economy from an agricultural economy via industrialization into a service society. While parts of China or India are still in a rural phase, other regions are already becoming significant financial centers.

Urbanization and infrastructure in China and India

China has the fastest growing construction industry in the world and currently accounts for approximately a quarter of the world's building projects. A second wave of Chinese urbanization (second-tier cities not along the coast) is in the works. Given the historically high correlation between real estate development and metal consumption, statistical evidence for metal prices points towards a «second China» that will keep supply and demand tightly balanced.

The positive outlook for the industry is being increasingly supported by the private sector. Overall, the development is boosted by the expanding economy, privatization, China's entry to the World Trade Organization, the Olympic Games in 2008, foreign investments and changing laws.

The 11th Five-Year Plan (2006–2010) foresees newly added employment of 45 million people in urban areas and the transfer of another 45 million from rural areas. Central government spending on infrastructure has actually declined because different projects are being increasingly outsourced to private investors or local governments. This means that a lot of infrastructure projects do not appear on government balance sheets anymore. This is, for example, the case for Shanghai's metro lines, which are being built at stunning pace, or the expansion on Kowloon Railways, which never appear on Hong Kong's government balance sheet. This supports our view that the measurement of basic materials consumption is still the most reliable indicator. Across all other economies throughout Asia Pacific, GDP growth is set to expand in 2006, in our view, and the construction sector will play a key role. Overall, the Asia Pacific region, primarily China, Indonesia, Taiwan and Malaysia, should see further strong infrastructure growth (the Philippines and Hong Kong are fiscally restrained).

In India, the construction market was worth USD 51 billion and accounted for around 7% of GDP in 2004. Construction statistics are difficult to obtain and consequently make the forecast process quite difficult. We expect an increase in the contribution from the construction sector to India's GDP as a result of the government's major Golden Quadrilateral project (a road network linking the four biggest cities) and the Sagarmala project (an integrated port and shipping development scheme). Together with a large amount of infrastructure requirements and projects in the near future that are ↗

Table 1 Source: World Bank, "Infrastructure and the World Bank," 12 September 2005

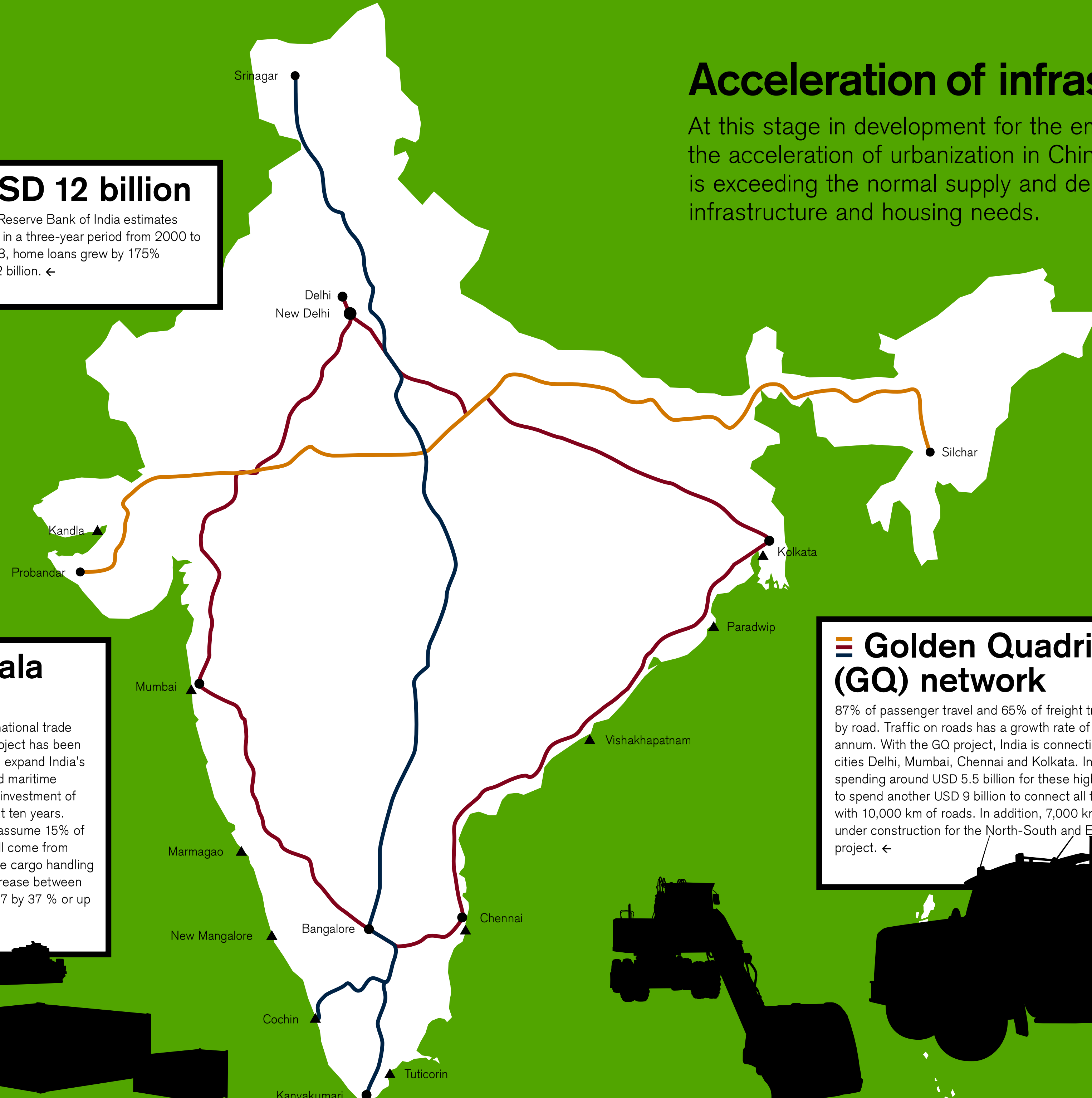
Basic infrastructure indicators

The World Bank reports on infrastructure in the developing world, and outlines basic infrastructure indicators. Every region has particular needs and risks. The most common point for all the global emerging markets is that more money needs to be spent on infrastructure.

Region	Africa	East Asia	Eastern Europe	Latin America	Middle East and North Africa	South Asia
Population (million)	674	1,823	474	518	300	1,384
% living on less than USD 1 a day	46	15	4	10	2	31
% urban population	36	43	65	77	59	28
% urban population projected by 2030	51	62	70	85	70	42
Major access indicators						
Electricity (% of population with access to network)	24	88	99	89	92	43
Water (% of population with access to improved sources)	58	78	91	89	88	84
Sanitation (% of population with access to improved sanitation)	36	49	82	74	75	35
Roads (% of rural population living within 2 km of an all-season road)	34	95	77	54	51	65
Teledensity (fixed-line and mobile subscribers per 1,000 people)	62	357	438	416	237	61

Acceleration of infrastructure

At this stage in development for the emerging markets, the acceleration of urbanization in China and India is exceeding the normal supply and demand cycles for infrastructure and housing needs.



USD 12 billion

The Reserve Bank of India estimates that, in a three-year period from 2000 to 2003, home loans grew by 175% to 12 billion. ←

▲ Sagarmala project

Ports handle 90% of international trade in India. The Sagarmala project has been launched to modernize and expand India's ports, inland navigation and maritime transport. This involves an investment of USD 22 billion over the next ten years. While the government will assume 15% of the investment, the rest will come from the private sector. Thus, the cargo handling capacity is expected to increase between 2002/2003 and 2006/2007 by 37 % or up to 565 million tons. ←

≡ Golden Quadrilateral (GQ) network

87% of passenger travel and 65% of freight traffic in India is by road. Traffic on roads has a growth rate of 7–10% per annum. With the GQ project, India is connecting the four major cities Delhi, Mumbai, Chennai and Kolkata. India is currently spending around USD 5.5 billion for these highways, and plans to spend another USD 9 billion to connect all the major cities with 10,000 km of roads. In addition, 7,000 km of highways are under construction for the North-South and East-West Corridor project. ←

Source: Investment and Trade Promotion, Division of the Ministry of External Affairs, Department of Shipping, Ministry of Shipping, Road Transport and Highways, Government of India

Figure 1 Source: UN Department of Economic and Social Affairs, World Population Prospects: The 2003 Revisions

Urbanization estimates in Asia by region

Many factors justify an above-consensus view on pan-Asian domestic demand. China and India are benefiting from overall economic transformation based on the industrialization and urbanization of the rural population.

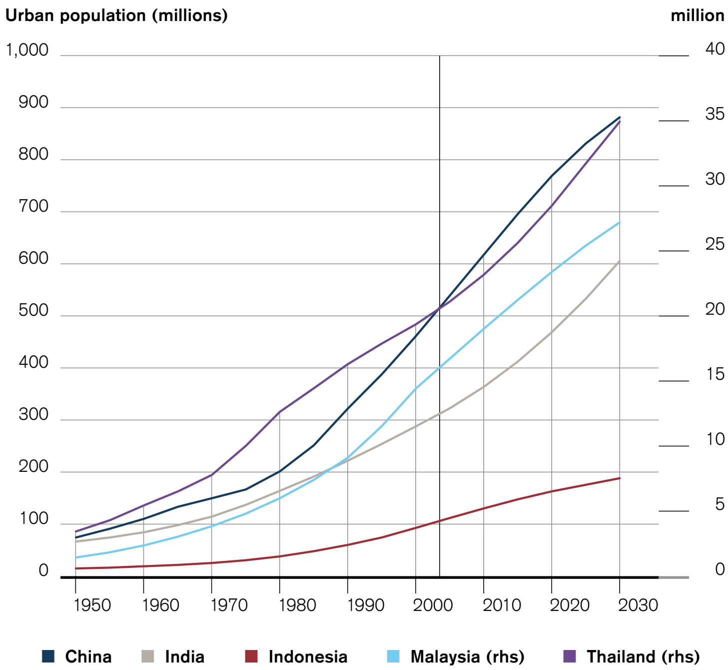


Figure 2 Source: UN Department of Economic and Social Affairs, World Population Prospects: The 2003 Revisions

China: Rural vs. urban population

The acceleration of urbanization in China and India is exceeding the normal supply and demand cycles for infrastructure and housing needs. The chart below is made up of a mixture of historic data and estimates.

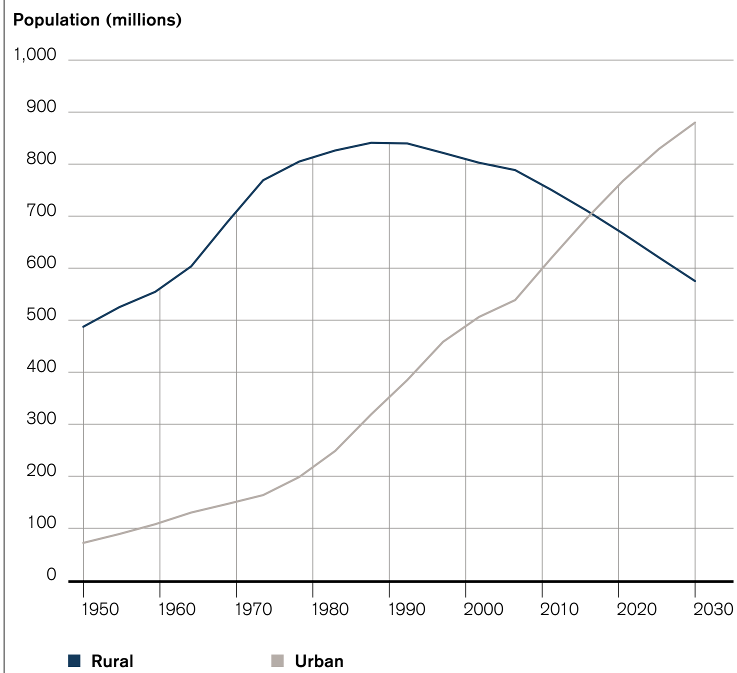


Figure 3 Source: International Cement Review, 6th Edition, Credit Suisse

Cement consumption in major regions

China is actually the fastest growing construction industry in the world and currently accounts for approximately a quarter of the world's building projects.

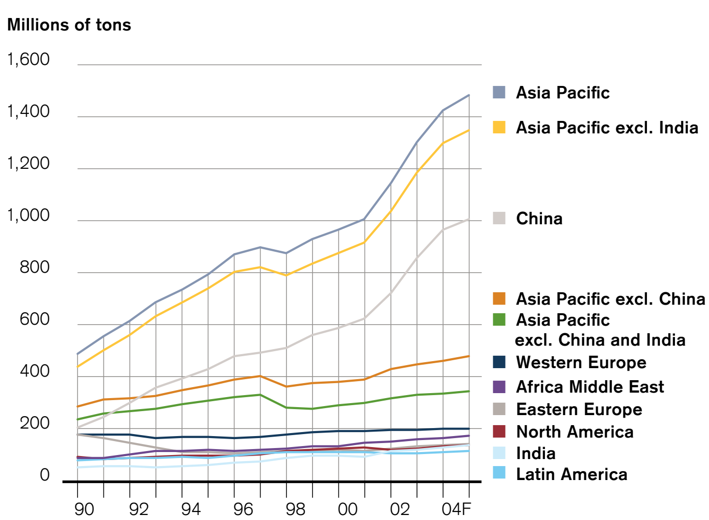


Figure 4 Source: BNP estimates, Credit Suisse

Trend in regional cement consumption

Cement consumption reaches a self-energizing phase at a certain point, mainly driven by rising incomes, followed by increasing private consumption and the transformation of the economy into a service society.

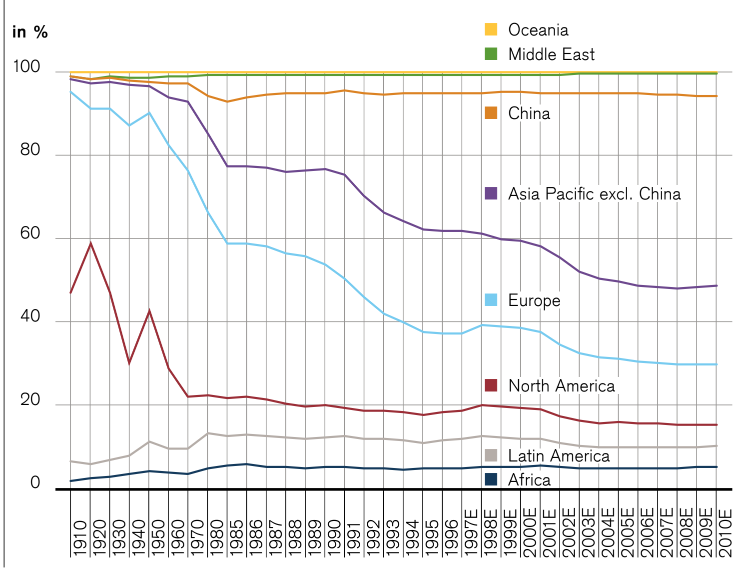


Figure 5 Source: International Cement Review, 6th Edition, Credit Suisse

Per capita consumption of cement in Asia

A lot of infrastructure projects do not appear on government balance sheets anymore. In our view, the measurement of basic materials consumption is still the most reliable indicator for infrastructure projects.

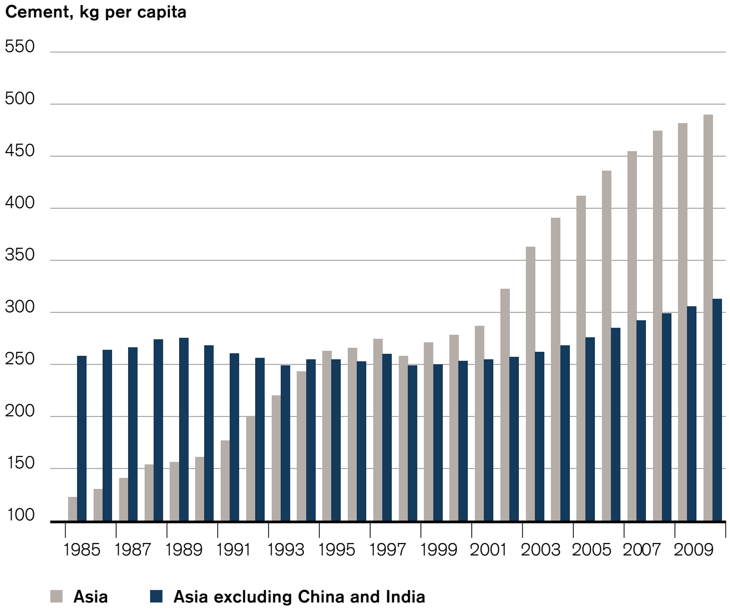


Figure 6 Source: International Cement Review, 6th Edition, CRIS INFAC, CSIB Research

India: Growth in cement industry

Together with a large amount of infrastructure requirements and projects in the near future that are all part of India's Vision 2020, the whole building industry should enter a boom phase.

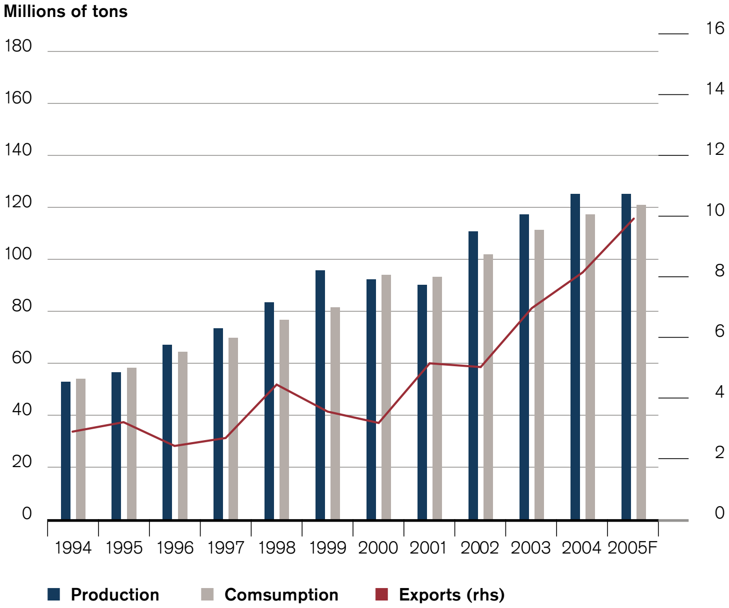
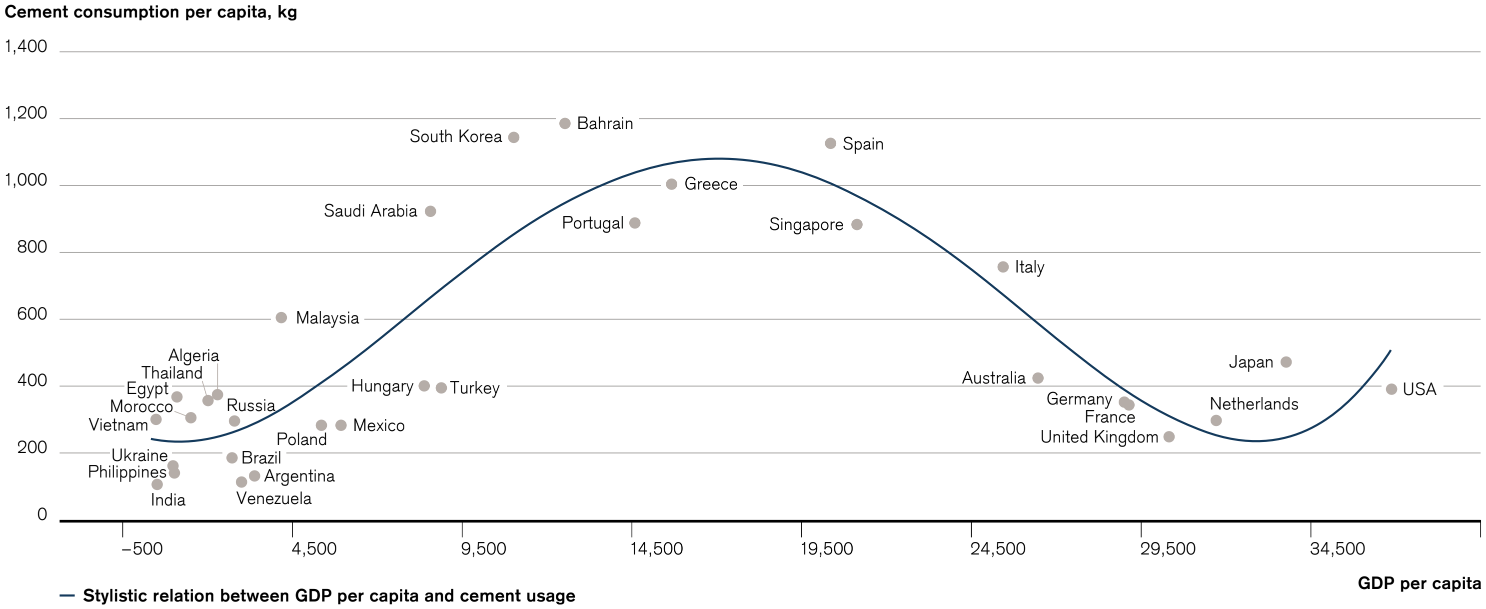


Figure 7 Source: International Cement Review, Credit Suisse

Per capita consumption of cement vs. GDP

Cement consumption in mature economies reaches a peak and decreases when these countries evolve into developed markets. Successful companies want to position themselves in EM countries with potential GDP growth.



all part of India's Vision 2020 – an official plan of India's government to develop the country – the whole building industry should enter a boom phase **(see figure 6)**. Cities and villages require huge urban infrastructure and facelifts in terms of metro systems, convention centers, parking facilities, etc. Rising income levels also fuel residential construction, which is already enjoying healthy growth rates. The Reserve Bank of India estimates that, in a three-year period from 2000 to 2003, home loans grew by 175% to USD 12 billion.

Successful companies move with markets

Infrastructure projects are the main driver (50%) along with residential and nonresidential construction for global building material companies. In **figure 7**, we can easily see that cement consumption in kg per capita in mature economies reaches a peak and decreases when these countries evolve into developed markets (Portugal, Spain, Greece). Therefore successful companies want to be best positioned in emerging-market countries with potential GDP growth.

The world's leading cement suppliers Lafarge and Holcim shifted their business models and strategy accordingly to gain a foothold in the most promising emerging markets to capture the future growth edge. Cement markets are highly local in character, based on the fact that cement is too heavy and therefore simply too expensive to ship – especially for projects in non-coastal areas –, and companies have to move their business models in line with market demand. Both Lafarge and Holcim developed their businesses mainly through acquisitions and tried to build up their own production facilities to a much lesser extent **(see table 2)**.

Protracted long-term underinvestment has now provided sellers of building materials and construction services with an extraordinary advantage over the buyers. On average, industry forecasts suggest a capacity increase of 600–700 million tons in the global cement industry between 2005 and 2010, which is roughly one quarter of the total capacity at year-end 2005. Nearly 100% of the new capacity will come on-stream within the indicated timeframe in these markets. Since the cement industry is cyclical, free cash flow generation develops accordingly. Historically, cement producers have tended to invest in new capacity when free cash flow generation has been high. Consequently, producers have tended to invest in their largest capacity additions when demand has been close to its peak. The key question going forward is whether the cement industry is again facing a period of mayor overcapacities similar to what already happened after the “tiger” boom in Asia. Lower demand resulted in overcapacity, and it took the industry quite a long time to adjust. After the recent past events, we think that companies have a much more realistic view on market developments and that the capacity increases are justified, thus supporting our view of a long-term market uptrend. ■

Table 2 Source: Lafarge, Holcim, Credit Suisse

Relative capacity increases in EM as a % of total sales
Lafarge and Holcim shifted their business models and strategy to gain a foothold in the most promising emerging markets. Both companies developed their businesses mainly through acquisitions.

	Lafarge		Holcim	
	1995	2005	1995	2005
EM sales as a % of total group sales	19.6	32.6	27.3	41.1

Soft commodities: The next place to be?

While soft commodities have been neglected in past decades, we believe catalysts such as rapidly rising demand in China and the emerging markets, climate and environmental issues, demand for bioenergy and the indirect effect of high energy prices will change soft commodities from a cheap uninteresting asset to a rarity in the medium to long term.

Hervé Prettre, Head of Equity Trading Research, **Tobias Merath,** Commodity Analyst

Soft commodities have been the neglected asset class in the past decades on the back of stagnating demand, oversupply and poor investment in this field from emerging markets. We are restricting our coverage of soft commodities to agricultural commodities like corn, soy, wheat, cotton, coffee, cocoa, orange juice and palm oil, where we expect rapidly rising demand in China, the enrichment of emerging markets, climate disorders, environmental issues, demand for bioenergy and the indirect effect of high energy prices to have a significant impact. We think they have the potential to surprise similar to that of oil in the last ten years.

In the past, soft commodities have suffered from an increase in industries' R&D activities. Industry has produced cheaper alternatives to an array of products made from soft commodities ranging from soy (replaced by man-made food for cattle), cotton (replaced by synthetic fibers) to sugar (low-calorie additives) and drinks (orange juice, coffee, cocoa replaced by flavored drinks). This was made feasible by technology breakthroughs in an environment of cheap oil prices (direct use of oil or indirect use for cooking/food processing). Productivity improvements and companies focusing on value added have also reduced demand and, more significantly, lowered the volume of raw materials in relation to value added. While this trend has existed as long as industry itself, it has accelerated on the back of higher investment since the 1980s. Meanwhile, new agricultural methods and fertilizers enable producers to obtain a higher yield on existing crops, and to implement production in new territories. Unlike the case of depleting oil reserves, the growing possibilities to increase production have caused soft commodity producers to lose much of their pricing power. Soft commodities have also suffered from the internationalization of major companies. Over the past 30 years, the world economy has eliminated a number of barriers and companies have internationalized. As a result, the largest companies using soft commodities as inputs, such as Nestlé, Danone and McDonald's, have significantly increased their bargaining power and put the independent commodities producers under pressure. Parallel to the internationalization of staple buyers, however, increased capacities in the area of international freight have reduced potential demand in some regions, thus limiting pricing pressures in some commodities markets. Finally, soft commodities have suffered from declining interest from investors. As the share of value added by soft commodities in the industrial process began declining, investors no longer saw them as interesting investment alternatives and dropped them in favor of technology, the Internet,

Figure 1 Source: Credit Suisse

Long-term return comparison of main GSCI components

Soft commodities have received little interest from investors in the past. The GS Agriculture Index reached an all-time low in November 2005.

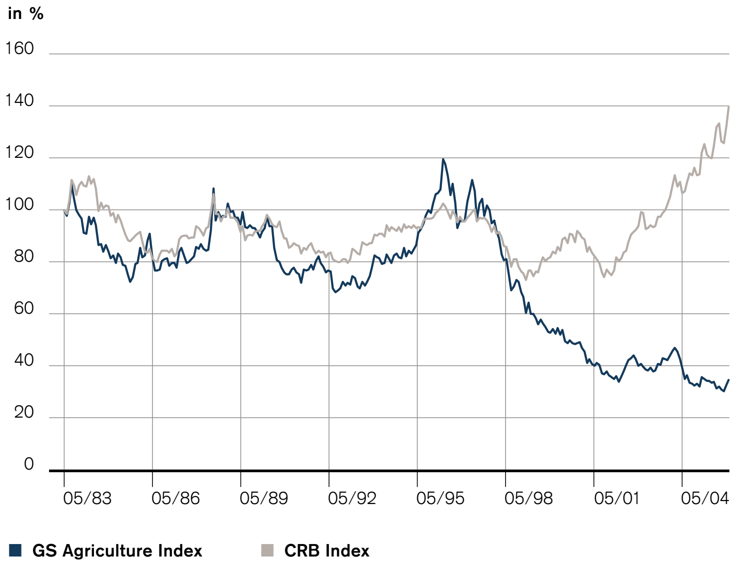
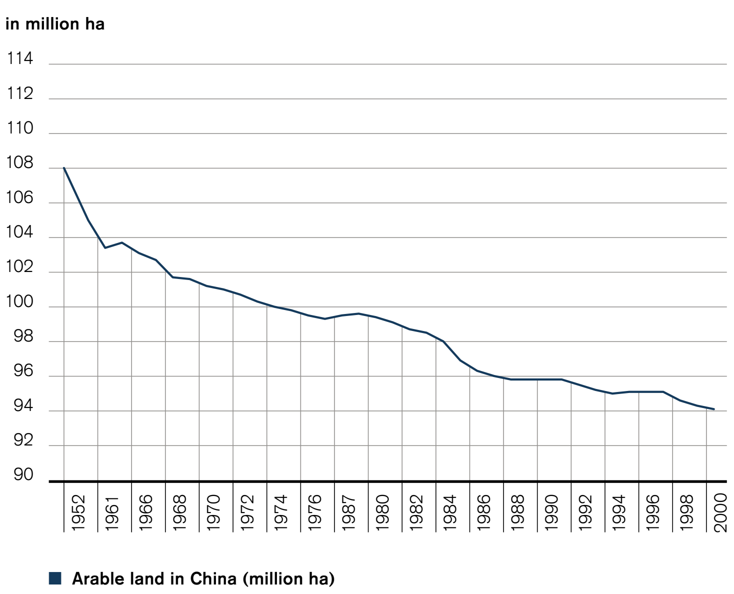


Figure 2 Source: International Food Policy Institute, Washington DC, 2000

Arable land in China

China has lost more than 10% of its arable land in the past 50 years, while its population has more than doubled.



materials, real estate, bonds, and more recently, industrial commodities and precious metals. The asset class is also perceived as risky due to the powerful effect of weather on prices, as well as the effect of political instability in third world countries. Major swings have deterred risk-adverse investors in the past. As a result, soft commodities have become an asset class that receives little interest from private clients, with almost no analyst coverage in the industry and a reputation as boring underperformers.

As a result, the oldest tracker of soft commodities, the Goldman Sachs Agriculture Index (created in 1969), reached an all-time low in November 2005, before slightly recovering thereafter, as highlighted by **figure 1**. The index, composed of several commodities with a strong bias toward soy, does not reflect single strong moves such as those experienced by sugar or orange juice, but can be seen as a proxy for the whole panel of soft commodities. Global soft commodities have been the worst performing asset of all the commodities. Unlike the correlated move seen in energy, precious metals or base metals, the rise of a minority of soft commodities did not trigger a major move of the whole asset class. We do not think that the situation is likely to change in the short term. However, in the medium to long term, some catalysts for soft commodities are emerging, which could give the asset class a boost.

Demand in China and the emerging markets climbing rapidly

We are currently witnessing a trend of rising demand and depletion of agricultural land in China. The economic and population growth in China have induced a rising standard of living and thus a rising demand for soft commodities. At the same time, China has clearly given priority to energy and metals in its development path, sacrificing agricultural land and equipment in its investment plans. Since many agricultural lands were located around cities to feed the urban population, a large share of agricultural land has been sacrificed to the benefit of factories and buildings. As a result, only 30% of China's soil can be used for agriculture now. Due to poor investment on those soils and rising climate disorders (pollution, floods, etc.), only 14% of this land is arable. As shown in **figure 2**, China has lost more than 10% of its arable land in the past 50 years, while its population has more than doubled in the meantime and the share of urban population has risen from 14% to 28%. In 2004, China started importing wheat and even cotton, one of its key export products (textiles), and more than doubled its soy imports in 2004. This call on international soft commodities is unlikely to reverse in view of the expected further growth in GDP per capita, as well as local problems such as water pollution, outdated irrigation systems and lack of transportation infrastructure to convey food from agricultural regions to main cities. China currently imports only 2% of its food needs. The growth potential for imports of Chinese soft commodities is massive; Exane BNP Paribas estimates that this share could rise to 25% or even 35% in the next few years. The trend has already started as shown in **figure 3** with the example of corn: +50% for corn in January 2006 YoY, and +70% for cotton. This is reminiscent of another story: China was not importing oil ten years ago; it now imports 25% of its oil needs and has become a major catalyst for oil prices.

The Chinese example can be replicated at world levels, although to a lesser extent. The United Nations expects the world's population to rise from 6.3 billion currently to 8 billion in the next 25 years, which should trigger a constant increase in needs. Most economic forecasters expect GDP per capita to rise in the coming decades

Figure 3 Source: Bloomberg

Chinese imports of corn, monthly

China currently imports only 2% of its food needs. There is massive growth potential for imports of soft commodities in view of the expected further growth in GDP per capita, as well as the problems in Chinese agriculture.

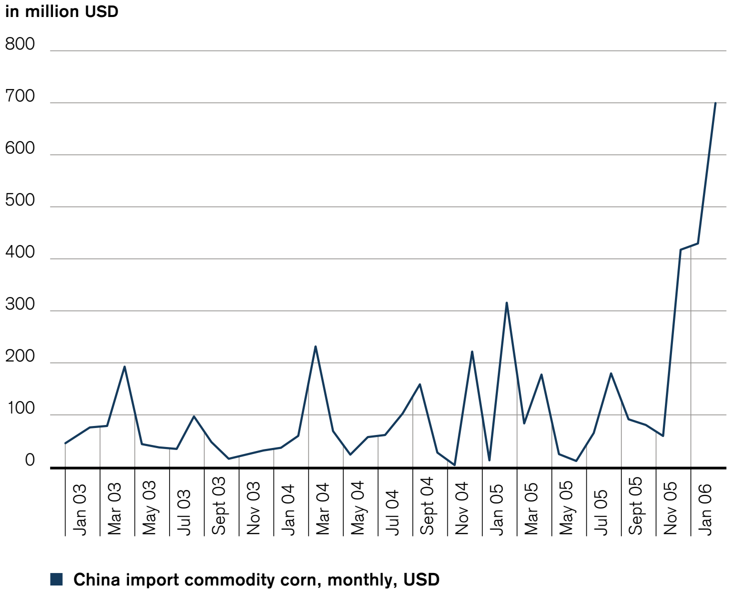
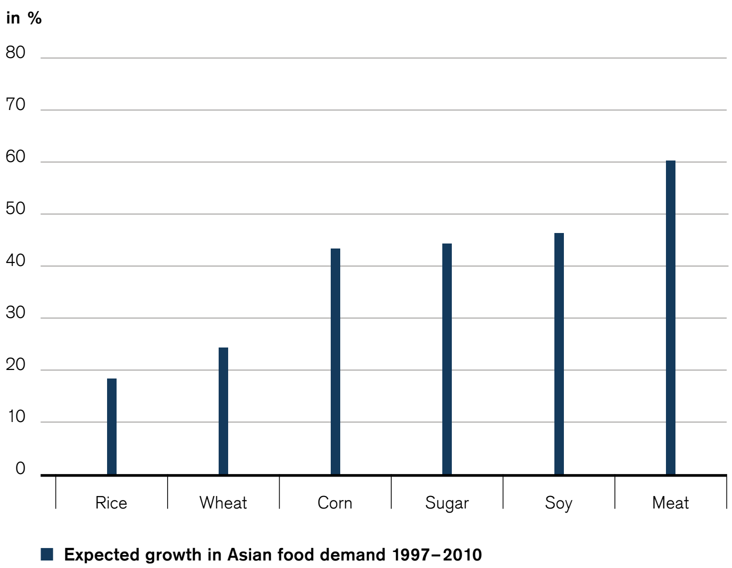


Figure 4 Source: Australian Government Department of Agriculture

Expected growth in Asian food demand 1997–2010

Rising GDP and the opening-up of local cultures to Western tastes should see the average daily amount of food consumption per capita rise, with people in emerging markets turning more toward Western-style food.



in emerging markets, which, together with the opening-up of local cultures to Western tastes, should see the average daily amount of food consumption per capita rise, with people likely to refocus their local diets more on Western-style food (sugar, orange juice, fish, meat, etc.). This trend has also been observed in Japan and South Korea in the past decade: flat rice consumption versus increasing demand for meat, sugar, and coffee. We believe this could be replicated in most emerging markets in the coming decades. Figure 4 highlights the expectations of the Australian Department of Agriculture in the next years, which point to the same conclusion. While the internationalization of local tastes also enables Western societies to consume a higher proportion of Thai curry, Japanese sushi or Moroccan pastille, the big trend remains towards standardization of Western food diets, mostly in major urban centers.

Over the past century, agriculture has been neglected as an area of investment. This trend accelerated in the 1980s, with the emergence of new investment opportunities: equity markets, emerging markets, real estate, information technology, etc. As a result, there is growing concern that agriculture will in future face the same situation as oil and metals, where underinvestment and declining productivity have led to a peak in production against a backdrop of rising demand **(see figure 7)**. Even developing economies have sacrificed agriculture to fully focus on industries and export. Figure 5 shows how India cut its share of public investment in agriculture from 15% in 1981 to 5% at the start of the 2000s. This imbalance could trigger a spike in agriculture prices over time, as no change has been seen in this policy in the past years, while population and GDP per capita have continued to rise.

Climate, environment, and the effects of high energy prices

Soft commodities are extremely sensitive to weather due to the effect of droughts or floods on crops. Scientists believe that the unusual weather patterns seen in the past years (a dramatic increase in the number of hurricanes, etc.) are linked to global warming and can be a harbinger of decisive climate changes. Hurricanes destroyed 15% of orange juice capacity in the USA in 2005, acid rains have ruined some Indian land, and the Aral Sea is considered to be dead, thus triggering a decline in agriculture activities in the region. Those are just a few examples. From 2000 to 2004, the FAO estimates that food emergencies linked to droughts increased from 50% of shortages to 70%. In the long term, increasing global temperatures pose a major threat and are expected to significantly reduce crop levels. Temperature increases have accelerated in the past decades and several scientists, including the Intergovernmental Panel on Climate Change (IPCC), have projected that the global average surface temperature will increase by between 1.4°C and 5.8°C over the period from 1990 to 2100, while sea levels could rise by between 9 and 88 centimeters. Crop yields vary considerably according to temperature **(see figure 6)**. Also, rising sea levels would claim a significant portion of land. Taking the middle scenario for rising sea levels would result in the loss of 11% of land in Bangladesh and 6% of land in Vietnam by 2100. Climate changes could definitely modify the seasonality and size of crops and trigger short-term supply disruptions in some soft commodities markets.

Rising oil prices, increasing dependence of Western countries on oil reserves in geopolitically unstable regions, and growing concerns about oil depletion have provided incentives to search for alternative energies. Among those new energies, ethanol, methanol, ↗

Figure 5 Source: Government of India

Agriculture share of total public investment, India

India cut its share of public investment in agriculture from 15% in 1980 to 5% at the end of the 1990s. This imbalance could trigger a lack of agriculture production over time.

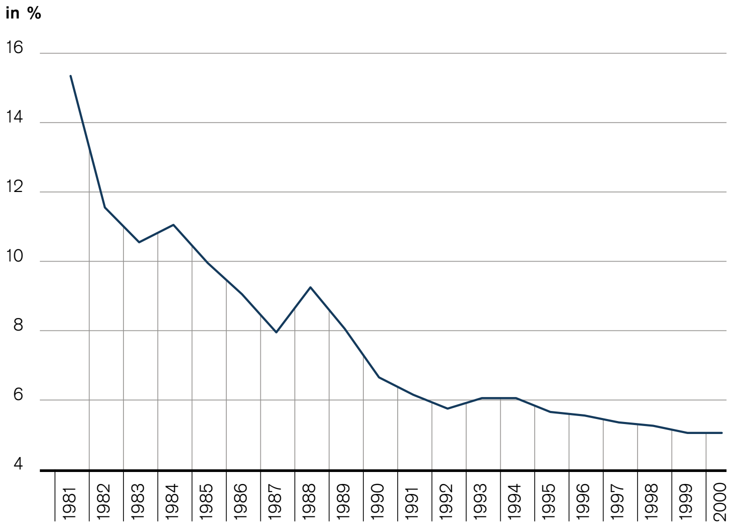


Figure 6 Source: UN Environment Programme

Crop yields versus temperature increase in the tropics

Climate changes could modify the seasonality and size of crops and lower yields in some soft commodities markets.

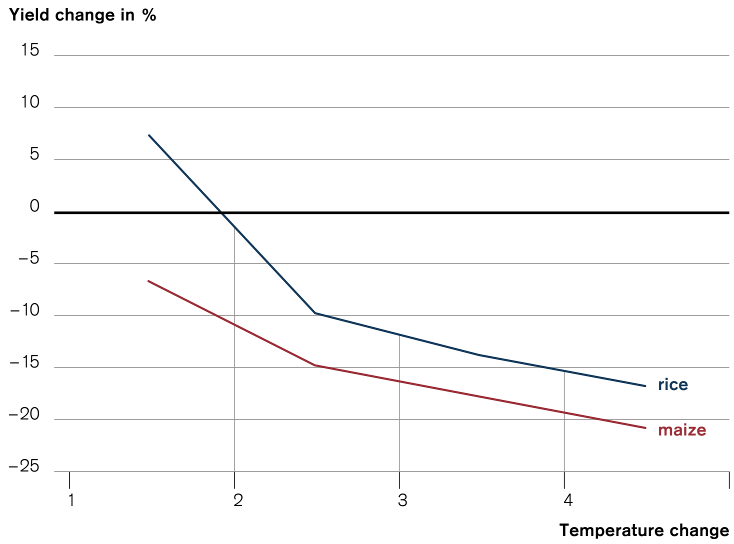
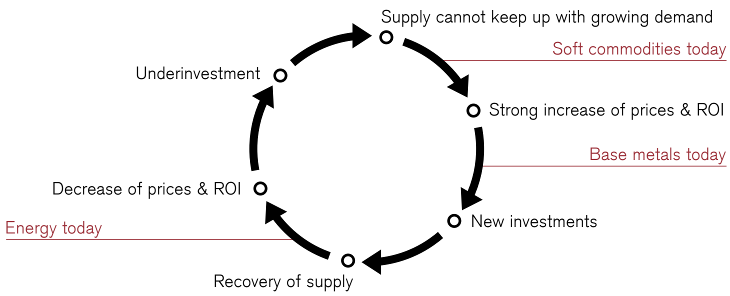


Figure 7 Source: Exane, Credit Suisse

The economic cycle of commodities

There is growing concern that agriculture will face the same situation as oil and metals, where underinvestment has led to a lack of production growth against a backdrop of rising demand.



and biodiesel have been some of the fastest growing: Brazil took a decision in 2005 to allocate 50% of its annual sugar production, the highest in the world, to ethanol generation. Now Brazil has become a net importer of sugar for the first time in its history. The USA, which is spearheading ethanol production using corn, has embarked on a similar path. In his State of the Union speech, President Bush announced the goal to replace 75% of oil imports from OPEC with local ethanol production (based on corn) by 2020. Finally, Europe is endeavoring to increase the share of ethanol and methanol in total gasoline consumption to 5.75% by 2010. This trend in high oil prices is unlikely to reverse in the coming years, and is likely to result in surging demand for corn and sugar for the purpose of gasoline substitution. We believe the trend towards cleaner energy has only just begun, and should benefit some agriculture-based energies, such as energies derived from sugar, corn, palm oil and soy.

Another effect of high oil prices is the declining attractiveness of the just-in-time model. Currently, a head of lettuce travels 1000 miles between the place it grows and the place it is sold. People in New York City consume more apples grown in Argentina than in upstate New York. This is made possible by the global specialization in agriculture output and the easy means of transportation. Since energy costs encompass 15% of total food/grain costs (linked to transportation), persistent high oil prices are likely to make this economic model less viable. As a result, the potential for food producers and retailers to negotiate prices throughout the world will be more limited, altering the mindset of the past decades, which aimed to negotiate lower agricultural prices or have agricultural products developed in cheaper regions.

Soft commodities an undervalued asset class?

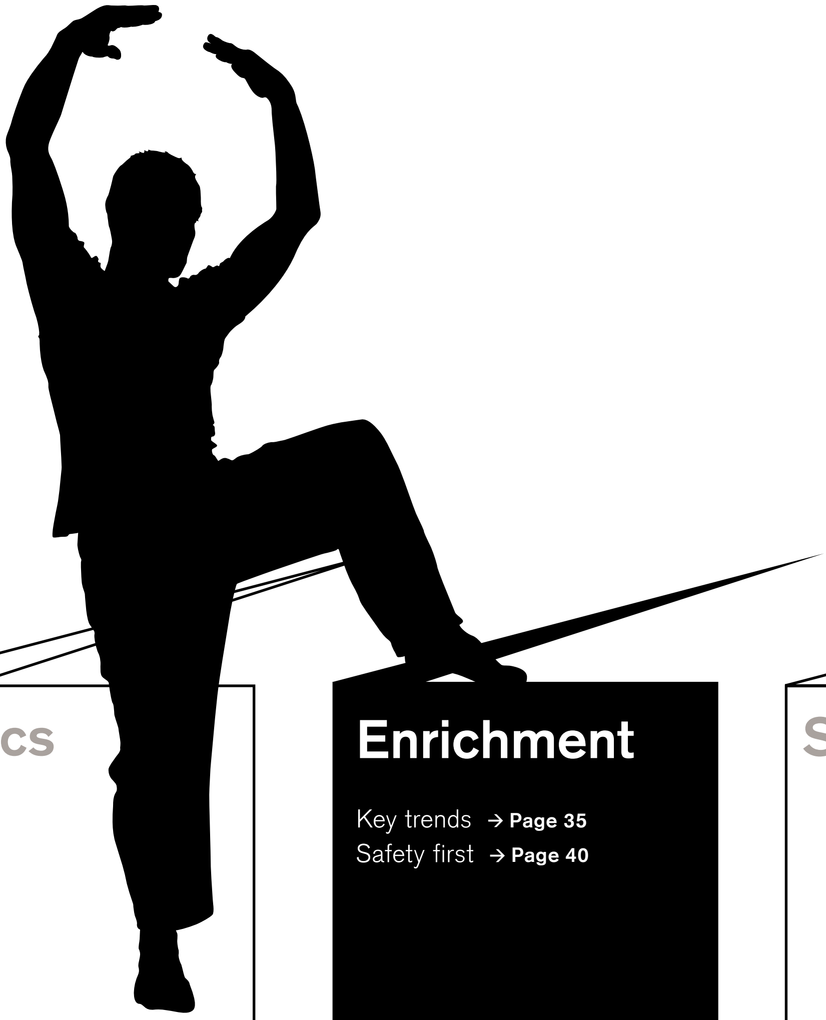
Some "gurus," such as Marc Faber, maintain the theory that the investment community switches assets on a regular basis, so that every asset class is expected to record a "boom" and a "bust" scenario. Now that we have seen this theory applied to technology stocks, real estate, government bonds and energy commodities, the investment community is looking for a new target, which might well be the "forgotten" class of soft commodities. Marc Faber believes that soft commodities have acquired the status of the new underowned asset that could become the next craze. This seems to be confirmed by speculators' rising net positions in the futures markets. According to the CFTC, net long positions in soft commodities have risen to a several-year high lately, but are still at a much lower level than in the past decade.

We believe some of the aforementioned catalysts are likely to support soft commodities prices in the future. This remains a long-term view that could be impaired in the short term by the negative factors at play for the past three decades. We therefore recommend that only risk-tolerant investors with a medium to long-term horizon acquire exposure to soft commodities. We recommend focusing on alternative energy sources that are likely to benefit from rising Chinese imports, the development of emerging markets, energy transformation, and which have suffered from underinvestment and are heavily exposed to the threat of climate disorders. We particularly recommend gaining exposure with a long-term investment horizon to commodities like corn, cotton, orange juice, sugar and palm oil. Credit Suisse Private Banking offers a panel of structured products, certificates and funds, to provide exposure to the soft commodities theme.

Investment opportunities via equities for investors wishing to gain exposure via stocks include the following names. Direct exposure to corn can be taken with Corn Products International, a US corn refiner and starch producer. In the small-cap world, German seed-cultivation company KWS Saat is worth mentioning. Investors can gain indirect exposure to corn in companies with ethanol production capability: Archer Daniels Midland is the leading US ethanol producer. In the small-cap world, Pacific Ethanol is actively developing its facilities to produce a large amount of renewable fuels, mostly ethanol. Bill Gates has a 23% stake in the company. Also indirect exposure can be gained with machinery producers John Deere and AGCO.

Cotton offers few investment opportunities suitable for private clients via equities, since quoted companies in this field are of limited size, and mostly stem from emerging markets, where small-cap trading can be challenging. In the USA, Delta & Pine represents one of the few opportunities, as the company produces cotton planting varieties in the USA. Gaining direct exposure to orange juice is also challenging, since most companies are private or belong to a consortium. Here, we would mention PepsiCo (BUY), which owns Tropicana, the leading US orange juice brand, as well as Coca-Cola (BUY), which owns Minute Maid.

In sugar, Südzucker, a German manufacturer of sugar, artificial sweeteners and starch, provides direct exposure to sugar prices. Cosan Industria is a leading Brazilian producer of sugar and alcohol fuel and CSR is the Australian equivalent. Khon Kaen is a leading Thai plantation owner and sugar processor. As far as palm oil is concerned, the most-quoted companies are small-cap names in Malaysia and Indonesia. IOI Corporation and PPB Oil Palms Berhad are examples of palm oil manufacturers and plantation owners. ■



Basics

Enrichment

Switching

Key trends in consumption

We see three key global consumer trends: bipolarization (premium versus discount products); health and wellness; and growth in emerging markets. Companies that are adapting their business models to these are particularly promising. We believe that European names are well prepared to benefit from these trends.

Olivier P. Müller, Equity Sector Analyst

No one wants to pay for mediocrity. Special things command special prices – people will pay high prices for top-end branded goods or the very latest technology. But for ordinary items, with highly competitive retailing and with the Internet offering easy price comparisons, today's consumers expect to pay very low prices. The result is an increasing bipolarization of consumption into premium and discount products, alongside related trends such as the emphasis on health and wellness products. We believe that the success or failure of companies in adapting to this new model will be reflected in sector valuations in the intermediate to long term, and that the disparity in valuations will tend to increase.

Bipolarization between premium and discount products

For some years, we have seen a trend toward bipolarization between premium and discount products in the consumer goods sector. On the one hand, consumers are increasingly less willing to pay a high price for basic products with little degree of differentiation, or for commodities such as precooked beans. Some consumer goods producers attempt to meet demand in budget-price, mass-market or discount segments through cost advantages, with high price elasticity and numerous substitution possibilities, particularly through private labels (volume-oriented business). Other manufacturers of consumer goods strive to succeed in the premium segment – where the price elasticity is low and, accordingly, margins are high – through differentiating their products in terms of quality, image or appeal.

The economic downswing in Europe in recent years prompted consumers to become much more sensitive to prices. In Germany, a type of so-called discount consumption has even emerged, figuratively characterized by the slogan "cheap is cool." Amid this budget price environment, hard discounters such as Lidl and Netto have thrived, exerting price pressure on traditional retailers, causing margins to dwindle through their aggressive pricing policies. In addition, private-label products have gained significance, competing with and, in some cases, even substituting for brands positioned in the lower-price segment. Traditional food retailers have attempted to evade the resulting pressure on prices and margins by expanding their product assortment into non-food articles (hypermarkets), thereby improving the price and margin mix. However, we believe that these retailers are not competitive enough or sufficiently focused. In the value-for-money segment, consumers are increasingly less willing to spend money. And for the companies operating in this segment – for example, Barry Callebaut in the industrial chocolate segment – a strategy of cost leadership has proven to be successful.

Trend toward premiumization of consumer goods

On the other side of the consumption coin, we see the phenomenon of premiumization. The demand for luxury goods continues to be robust, driven by upbeat consumer confidence, a growing number of affluent consumers and a pick-up in travel activity – particularly in Asia. Moreover, the luxury goods sector continues to

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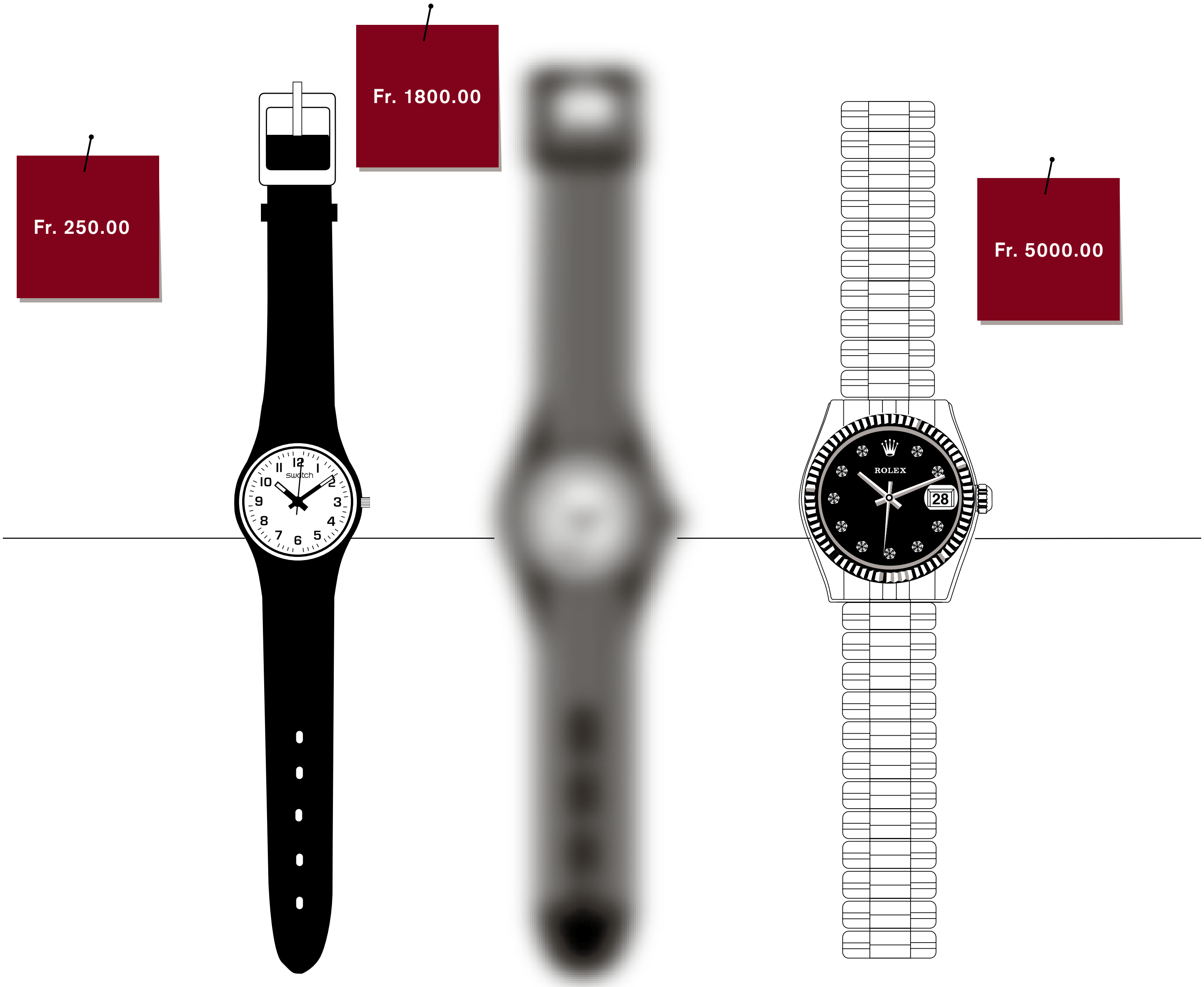


Bipolarization of consumption is one of the key trends in consumption globally: demand for luxury products continues to be robust. On the other hand, low-cost, mass market products continue to be successful as well. Products or companies caught in the middle are likely to face difficulties in the medium to long term.

show strong growth in the emerging markets, where the traditional luxury goods producers, such as LVMH or Richemont, are typically reaping the rewards. Companies that have managed to position themselves in this premium segment in the past five years are especially successful today. Furthermore, since these firms operate in a sector that is marked by price inelasticity, they realize climbing sales growth rates and enjoy expanding profit margins thanks to rising turnover volumes and favorable price trends.

In addition, the so-called trading-up phenomenon occurs in certain subsegments – i.e. the demand-induced substitution of average-quality products by first-class products – which generally favors the premium segment. In our view, the most important drivers of this trend have been demographic factors, cultural change, higher educational levels, increasing prosperity, declining cost of living and, in some cases, withdrawing equity from residential property. Trading-up products typically comprise new luxury wares boasting higher quality or offering better taste; or products that stir more emotions than conventional ones, but are still not exorbitantly priced. Such products are more expensive than traditional, average-priced products. On the other hand, they register considerably higher sales volumes than conventional luxury goods. Suppliers of these new products have succeeded in providing customers with additional benefits through technical, functional or especially emotional attributes.

New brands have emerged as a result of the trading-up trend: for example, Starbucks or Mariella Burani. Although some traditional luxury goods producers, such as Richemont, have established a presence and achieved success in the premium segment, few of these companies reap benefits from the trading-up phenomenon. In contrast, some watch manufacturers such as Swatch Group have profited from consumers trading up, thanks to their positioning in all price segments for watches, from the lower- to the medium-price brands like Longines and Omega, up to the luxury brands such as Breguet. The beverage sector has also undergone shifts in product portfolios recently as a result of the trading-up trend, in favor of better brands of champagne, liquors, or beer, for example. It is also fair to say that the substitution effect in Europe, from beer to import beer, as well as to liquors, can be at least partially attributed to the trading-up trend. Even in the chocolate segment, we see a trend toward premiumization. As depicted in **figure 2**, the premium segment here is dominated by Lindt & Sprüngli, in particular, while private labels predominate in the discount segment, and the remainder of the suppliers, such as Kraft, Masterfoods and, in our view, especially Cadbury Schweppes are categorized in the middle. Lindt & Sprüngli has benefited for several years from the trend toward higher-quality chocolate and has thus recorded above-average sales growth rates through rising volumes (up 8.1% in 2005), increasing prices (+1.5% in 2005) and improving product mixes (+1.8%), with expanding EBIT margins (+30 basis points in 2005). In our opinion, companies that are not strongly focused on either discount products or premium products, due to their strategies or product portfolios, and are relegated to somewhere in the middle – for example, Ford or FIAT in the automobile sector – will likely lag behind their competitors in the medium term, particularly in terms of sales growth and margin expansion. This should be reflected in the valuations as well.

Health and wellness has emerged as a key growth driver

Driven by demographic factors, the health and wellness theme has emerged as one of the most significant consumer trends in the developed countries in the past ten years, especially for the food industry. While innovation has always been an important aspect in the food sector, the health and wellness trend has gained considerable significance, particularly in the last decade, and we think it will go much further. We also see a strong trend toward nutraceuticals (i.e., foods designed to have a beneficial effect on human health), leading to increasingly close cooperation between the food and pharma industries. These are typically situated in the higher- ↗

Table 1 Source: Credit Suisse

Key themes in the consumer goods sector

While consumers are less and less willing to spend money for commodity-type products, and budget-price products are enjoying considerable success in some markets, the demand for luxury goods is still robust in other markets. The result is an increasing bipolarization of consumption into premium and discount products, alongside related trends such as the emphasis on health and wellness products. In addition, companies with significant exposure to emerging markets are still enjoying double-digit organic sales growth there.

	Bipolarization of consumption	Health and wellness	Emerging markets
Automobiles	**BMW**, Porsche	**Toyota**	Hyundai, Proton
Retailing			Tesco, Carrefour, Metro
Luxury goods	**Swatch Group, LVMH**		**LVMH**
Food, beverage and tobacco	Lindt & Sprüngli	**Danone, Nestlé,** Emmi, **PepsiCo,** Kraft, **Barry Callebaut**	**Danone,** Unilever, **Nestlé, PepsiCo,** Kraft, **Diageo,** Pernod-Ricard, **InBev** and SABMiller
Household and personal care	L'Oréal		L'Oréal

Companies in bold are rated BUY by Credit Suisse.

price, greater price-inelastic range of demand and thus show substantial growth. In addition, these health and wellness products increasingly contribute to a favorable product-mix effect. For instance, the product categories water, chilled dairy/yoghurt, and fitness foods register above-average sales growth rates. Food producers that are currently quite active in this segment – such as Numico as well as Danone – already boast higher EBITDA margins and organic growth rates, which, in turn, justify their higher valuations **(see figure 1)**. Companies that shift their existing product portfolios this way should be subject to reratings in the medium term, which is why we regard this group of companies as especially attractive at present. On the other hand, product categories that have had less affiliation with the health and wellness trend, such as carbonated soft drinks, snacks and fatty foods as well as frozen foods, have recorded disappointing growth rates. In our view, companies like Unilever and Cadbury Schweppes have not been sufficiently active in the health and wellness trend so far. While we believe that Cadbury Schweppes will probably have difficulty positioning itself in the health and wellness segment due to its product portfolio comprising confectionary and beverages, we think Unilever holds considerable catch-up potential.

European companies are best prepared for the health trend

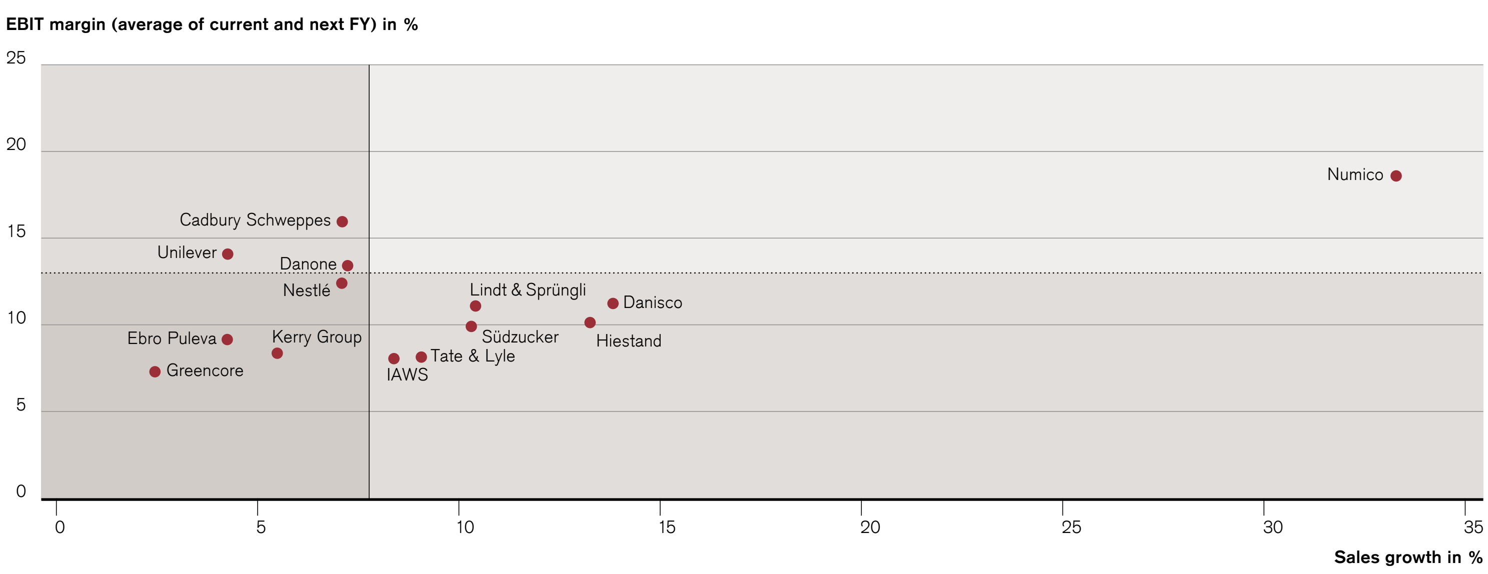
In the European food sector, we believe that Nestlé and Danone are the food producers with the greatest focus on the health trend. Nestlé, which is by far the world's largest food producer, has declared innovation and nutrition – i.e., the concentration on health-promoting foods – as one of its most important strategic business objectives. In spring 2006, Nestlé announced that it would separate its nutrition business in terms of financial reporting. The group already holds a portfolio of nutrition products accounting for a 5.8% share of sales and recording an organic growth rate of 7.6% in FY 2005. Nestlé's Branded Active Benefits (BABs) business, offering foods enriched with additives that have a beneficial effect

Figure 1

Source: Credit Suisse, Datastream, IBES (March 2006)

European food producers' sales growth and EBIT margins

Exposure to the health, wellness and nutrition markets allows for higher organic growth and better operating margins.



on health (nutraceuticals), has realized sales growth rates of 48% (CAGR) in the past five years and a 20% gain in sales in FY 2005, compared with organic growth rates of 6.2% for the overall group. We think that directing a strong focus on the nutrition business will be the decisive factor in the medium to long term for Nestlé, enabling the company to surpass its group sales growth target of 5%–7% per annum and especially to sustainably boost the margin in its core operations. This also underscores Nestlé's long-term targets for its nutrition business: calling for an EBITA margin of 20% and an organic sales growth rate of 10% p.a. In this context, we anticipate that Nestlé could carry out smaller add-on acquisitions in this business segment and possibly divest some underperforming, nonstrategic commodity business units, such as its meat business in Europe. Danone boasts two robustly growing businesses in this segment, particularly with its Fresh Dairy Products (nutraceuticals) and Beverages divisions, which realized organic growth rates of +7.0% YoY and +10% YoY, respectively, in FY 2005. In addition, some small- and mid-cap companies could certainly achieve success in the health segment with their niche-market strategies. Noteworthy here are, for example, Barry Callebaut, with the launch of sugar-free and organic chocolate products, as well as Emmi, with individual dairy products containing health-enhancing additives.

In our view, the major US food producers still lag somewhat behind their European counterparts with respect to pursuing the nutrition trend. The snack and beverage producer PepsiCo is in the process of carrying out innovative restructuring of its most important product lines. In its snacks business, PepsiCo has introduced low-calorie, low-fat products with the Frito-Lay brand. Moreover, in its beverages business, the group is expanding its product portfolio into noncarbonated drinks and enhanced beverages. Kraft, as a pure food producer, has supplemented its product assortment with low-calorie and low-carbohydrate food products, but we believe the company still lacks innovation and strategic initiative in the health, wellness and nutrition segment, compared with European food producers. On the other side of the world, the Japanese food producer Ito En boasts a well-diversified product portfolio of beverages, and the company advertises its premium products with the attributes "natural," "healthy" and "safe."

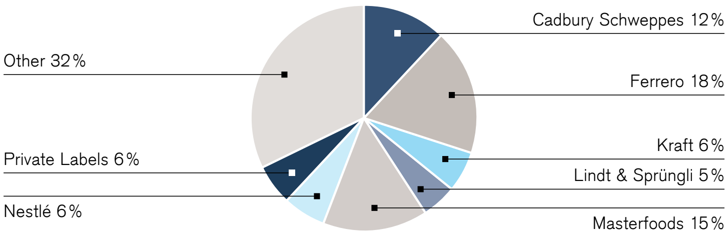
Robust economic growth prevails in the emerging markets

The emerging markets constitute the third key theme in the consumer goods sector. Thanks to the sustained robust economic growth in the emerging markets, people in these countries are gaining increasing access to consumer goods. Consequently, producers and retailers face the challenge of not just distributing high-priced luxury goods in these countries, but also increasingly offering affordable products in the moderately priced segment, which nonetheless shows strong sales growth rates. Each of the three major food companies – Nestlé, Unilever and Danone – generates roughly one third of their sales and profits in the emerging markets, while Cadbury Schweppes probably holds a much smaller share in profits here. Although non-food retailers have a stronger presence in Europe, the three large food retailers Carrefour (Asia, South America), Tesco (Asia, Eastern Europe) and Metro (Eastern Europe) each generate about 20% of their sales in the emerging markets. Luxury goods manufacturers, such as Swatch Group and LVMH in particular, should also reap rewards from the prevailing economic upswing in the emerging markets. ■

Figure 2 Source: AC Nielsen, Credit Suisse (Feb. 2006)

Chocolate confectionary market shares in Europe

Helped by its strong focus on quality and innovation, Lindt & Sprüngli boasts a unique position as a premium chocolate producer with a good market share.



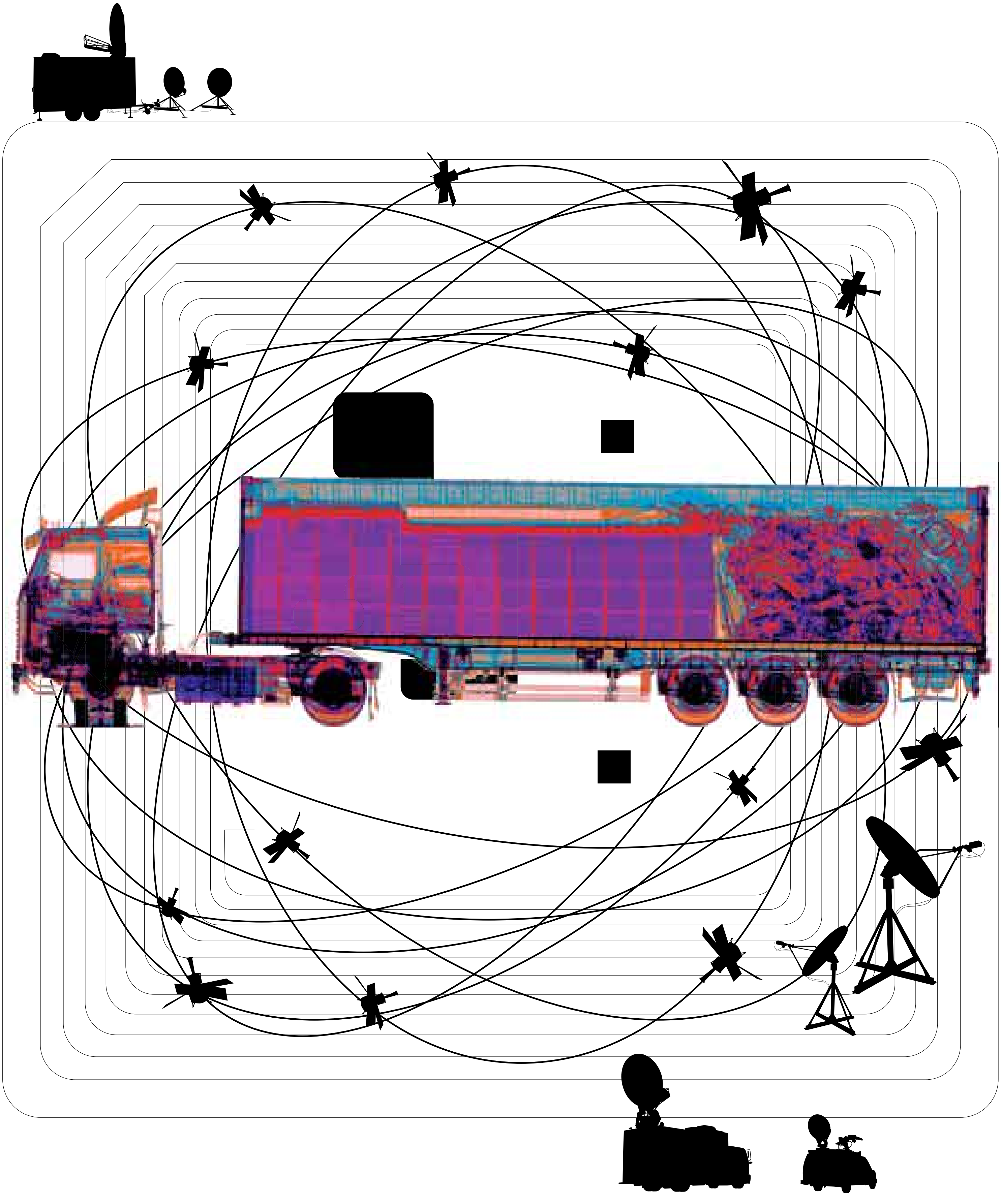


Photo: Smiths gallery

Caught at the border! X-rays of a 40-ton truck show smuggled cigarettes in front, covered with a load of scrap metal. A visual inspection would have only revealed the freight, without thinking about unloading it to see if anything was underneath. Recent technology now enables customs officers to quickly and inexpensively control transport goods, even if the trucks are locked or sealed.

Safety first in the twenty-first century

The latest X-ray technology allows a 40-ton truck to be scanned within seconds for illegal goods, bombs or weapons. Radio Frequency Identification (RFID) tags are small chips used against theft and forgery, as well as in safety, distribution and access control systems. The latest Electronic Stability Control (ESC) braking systems can help reduce the risk of rollover in light trucks. Security has taken on a new meaning in the twenty-first century.

Markus Mächler, Equity Sector Analyst , **Ulrich Kaiser,** Equity Sector Analyst

As people become wealthier, and the need to oppose crime and terrorism has to be reconciled with surging cross-border movements of people and goods, the economy is becoming more and more focused on safety and security. Since the September 11 terrorist attacks, the USA has dramatically increased its homeland security budget from below USD 10 billion ahead of the attacks to USD 19.5 billion in 2002 and a budgeted USD 41.1 billion in 2006. We estimate that this constitutes more than half of global homeland security spending of around USD 70 billion. The US expenditure covers border and transportation security (67% of the budget), emergency preparation and response (10%), chemical, biological, radiological and nuclear countermeasures and advanced information analysis and infrastructure protection (3%). Future annual growth is expected to be in the high single digits.

Detection systems are benefiting from the ramp-up in homeland security spending, particularly for baggage and people screening. The latest technology for X-raying individuals allows automated scanning over greater distances, enabling systems to identify knives, guns, etc., even if they are hidden in a bag. Such products, developed for military use, are currently finding their way into civilian life to protect public areas, such as railway stations, airports, government buildings, etc. There is a good chance that such systems might even be able to detect explosives from a larger distance in the future. Had such a system been in place, it might have changed the outcome of the latest terrorist attacks in London. The war against terrorism can only be won by intelligence and the appropriate investments. The market for commercial X-ray systems is highly fragmented with offerings from various providers such as GE, L-3, Siemens and Philips. More advanced and specialized systems are provided by QinetiQ and Smiths Group; both companies are now beginning to scale-up their detection knowledge for civilian usage. Smith Group is one of the few providers offering the full range of detection systems.

The latest development in homeland security can be seen in the Dubai police department, where a cinema-size screen, installed by Siemens, shows a map of the entire city and every building on a three-dimensional basis. Specialized software suggests solutions for every imaginable potential incident.

RFID tags: Both reality and vision

RFID systems were heavily promoted at this year's CeBIT, the world's largest trade fair showcasing digital IT and telecommunicatin solutions for home and work environments, but the technology actually dates back to the early 1970s. Originally conceived purely

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as a tool in theft prevention, RFID technology continues to find new applications with new technological advances. RFID is a noncontact method of storing and remotely retrieving data on transponders (chips) by radio frequency. Products, animals or persons that carry such a transponder can be automatically and rapidly identified from the data saved on the chip. This requires an RFID system comprising:

- a transponder (RFID label, chip, tag or radio tag),
- a tag reader,
- a data base, and the software to integrate with servers, services and other systems such as Enterprise Resource Planning (ERP), check-out or inventory systems.

The many and varied uses of these systems range from distribution, warehousing and logistics, where efficiency is the keyword, to access control (with chip cards such as ski lift passes and highway tolls) and to provide protection from forgery and counterfeiting. The latter use primarily relates to counterfeit goods, which result in damages of each year at least USD 400 billion (estimates: OECD, Internationale Industrie- und Handelskammer). One example is the need to authenticate drugs. For this reason, the US Food & Drug Administration advocates the use of RFID technology in the war against counterfeit drugs. The application can also be useful for lifestyle products, designer goods or branded products in general. If an expensive brand-name shoe, for example, is fitted with an RFID tag, the seller at the end of the value and supply chain can scan the tag into his inventory system and thereby access data relating to the manufacturing, detailing, and transport of the shoe. They can review the entire manufacturing and distribution path, which is the equivalent of an authenticity certificate for the branded product. They can give this information to the consumer, who is then assured that she or he has not bought a forgery, but has purchased the desired brand-name product.

Currently, there is a debate about the use of RFID tags in paper money to protect the notes against counterfeiting. Meanwhile, German passports have been fitted with RFID tags since 1 November 2005. The so-called ePass carries a photograph of the passport holder on an RFID chip. Fingerprints and an iris scan will be added in the future, possibly after 2007. The USA intends to follow suit in late 2006. Another area of application is the automobile, with many automotive companies being trailblazers, not least because many already work with compatible software solutions. A chip in the ignition key is the main component of electronic anti-theft blocking systems. When the key is inserted, the chip is identified by a reader in the ignition, and the stored code is the actual locking element in the car key. Automotive companies also use the technology in the production and distribution process. The Volkswagen group, for example, transports auto body parts in containers with RFID tags. By doing so, VW trims losses by one-third and saves around EUR 5 million each year. The software company SAP, which works closely with some of the large automotive firms, is a big proponent of RFID chip technology.

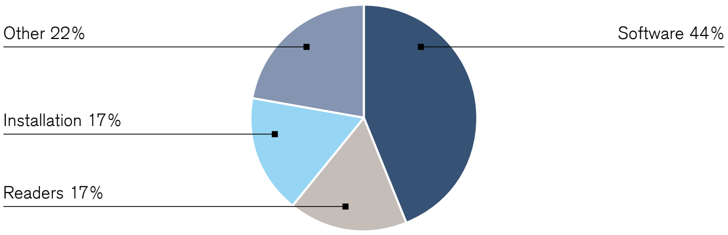
Cost and data protection are the main cause of slow starts

Despite its attractions, RFID technology is spreading only slowly. This partly reflects the high unit costs, although as volume rises, the cost of each chip will tend to fall. For growth to accelerate, both the manufacturers of the chips, and those who process, distribute or sell the products must be convinced that an investment in the necessary infrastructure is worthwhile. Only when they perceive

Figure 1 Source: Soreon Research

Software costs the most in RFID retail applications

RFID technology is spreading only slowly. Manufacturers of the chips, and those who process, distribute or sell the products must be convinced that an investment in the necessary infrastructure is worthwhile.



a financial advantage in upgrading their facilities will they put increasing pressure on manufacturers to fit products with RFID tags. This is particularly true for the retail trade **(see figure 1)** and the food sector. At the moment, passive chips can be acquired at a price of USD 0.20 to 0.30, which includes the costs for the antenna and laminate. Numerous semiconductor companies have already established a position in radio frequency chip technology. Philips, Infineon Technologies and Texas Instruments lead the market. For the semiconductor companies, this is currently a profitable but very small business niche. Research company IDTechEx estimates the market for RFID technology at USD 2.7 billion in 2006 and expects this figure to be around ten times higher, at about USD 26 billion, by 2016. Beside the costs, the other main reason for the sluggish introduction of this technology is the difficulty in ensuring secure data transmission from the chip to the reader, especially when several objects are scanned simultaneously and not sequentially, such as products in a shopping cart. Moreover, some packaging materials, such as aluminum foil, are problematic, as well as liquids, such as wine or juice.

But even when the technology is ready for the market, there will still be a big hurdle; namely, consumer fears over privacy. When "hidden" senders or readers are used, the consumer can no longer control what information is divulged. Hence, the proposed mass application of RFID tags has aroused concerns involving data protection. In the film "Minority Report," the spending patterns of consumers are recorded by shops on their databases, allowing them to bombard people with targeted advertising announcements when they return to the store on a later occasion – a nightmare future vision of overintrusive marketing. To ease such fears, some critics suggest that the tags be deactivated or destroyed after sale. However, it would hardly be possible to do so in a way that could be proven to the consumer. In 2003, the Metro Group fitted some of its customer loyalty cards with RFID tags without informing the customers. The group was subsequently given a "Big Brother Award." Although Metro is continuing its RFID test in its Future Store, it has exchanged the customer cards in the meantime.

RFID technology is sure to elicit increasing interest and find further applications. Due to the problems mentioned above, the technological advantages will probably not be fully realized. Since costs play an important role in decisions to use a particular technology, this will not be a business where manufacturers of RFID chips can achieve high margins, especially once demand increases to the point that Asian competitors enter the market. The winners will be those sectors (e.g. logistics, retail) where transactions can be conducted more securely and efficiently, and thus at lower cost. Ultimately, consumers will be the main beneficiaries.

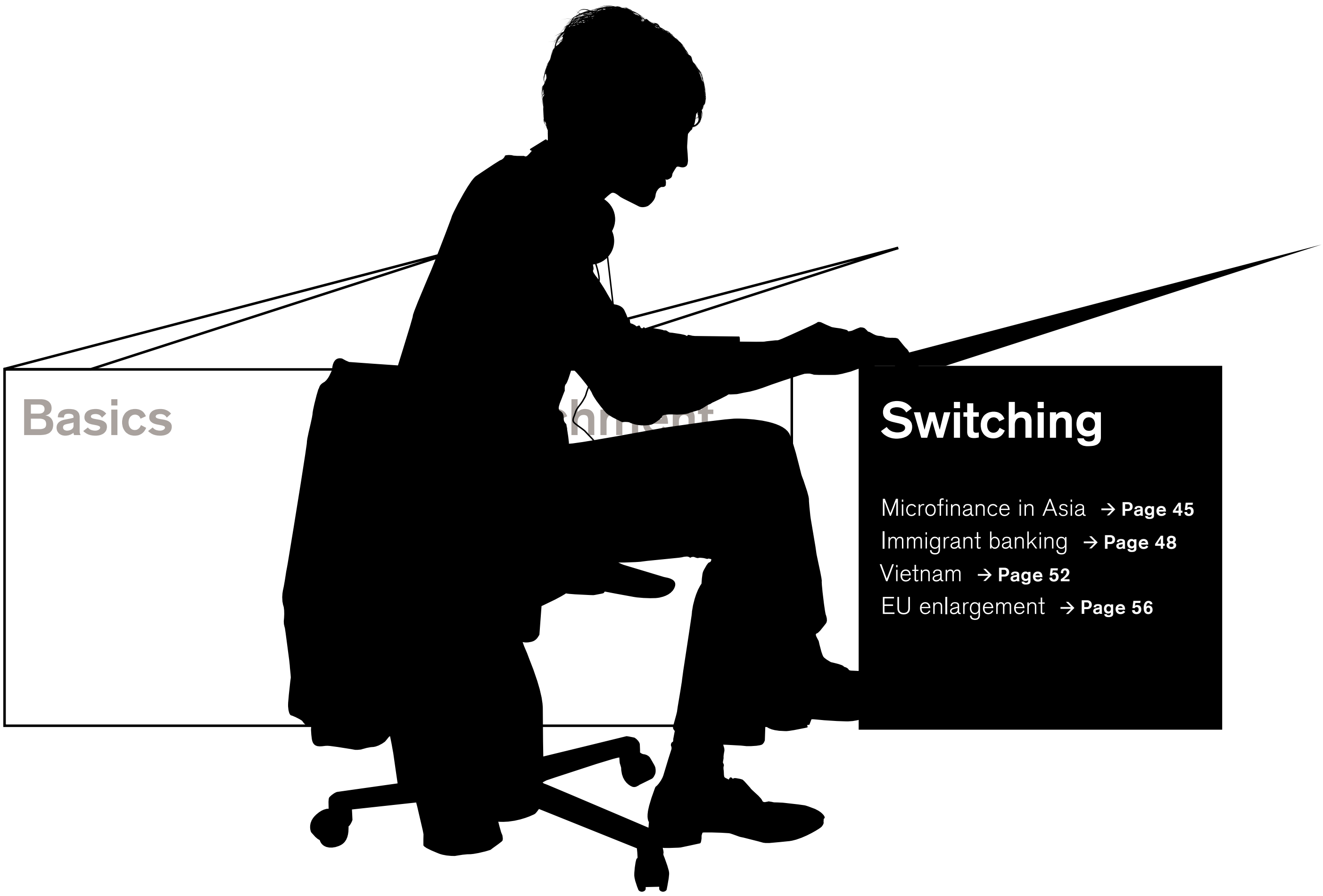
Travel safety technology

When it comes to traffic safety, technology is moving very fast. Air traffic control has to deal with an increased complexity of handling traffic and demand for car safety systems has increased significantly. To reduce the cost of potential damages, insurance companies are beginning to require certain safety systems on board before they provide insurance protection.

Research in this field is divided into precrash and postcrash systems. Precrash systems are often aimed at preparing the safety systems for an imminent crash or, preferably avoiding the crash altogether. Postcrash systems are devised to increase the occupant's chances of survival after a serious accident. There is no standard type of crash, and safety systems need to become more dynamic, as they need to react to innumerable possible incidents. Legislation in various countries now calls for different kinds of mandatory safety systems. This ranges from the longstanding obligatory installation of simple seat belts to much more recent developments like mandatory electronic stability control (ESC) braking systems for large cars with a higher center of gravity, such as light trucks in the USA, to prevent them from rolling over. Other safety features, like seasonal tire changes, have become an issue in several countries such as Germany, where insurance coverage can be reduced in case of accidents without the appropriate equipment installed.

What starts as a niche market can rapidly turn into an important safety feature. One example is voice recognition, which is no longer just a fun tool, but is now recognized as a safety tool. To keep the drivers' attention on the road and their hands on the steering wheel, an increasing number of gadgets like radio, navigation systems and phones will soon react to voice orders. To reduce the number of misunderstandings, which has so far tended to be a risk rather than a safety feature, the next generation of voice recognition will start a dialog with the driver, making sure the right function is going to be activated. Modern safety systems can do even more. In the case of an accident where air bags are activated, a control unit automatically calls an emergency center and provides the rescue team with the location of the vehicle from its GPS navigation system. The system can even collect information about the damage and connect the rescue team with the victims if possible.

The latest technology always finds its way to the market through the luxury segment, where clients often order all available options, sometimes regardless of their cost. The new S-Class of Mercedes offers the latest technology for active prevention and comfort. Systems like night vision and dynamic distance control are very expensive and the additional safety effect seems limited. Useful safety systems find their way from the luxury segment to the mass market in a short time. In the above case, demand from original equipment manufacturers (OEM) other than Mercedes seems lackluster, according to Continental, one of the system providers. Customers are prepared to pay for safety but not at any price. Between markets, there is also a difference in how much a customer is prepared to pay. In the USA, for example, nonmandatory safety systems hardly find their way to the mass customer, while in Europe, a new car without ESC safety systems has a clear disadvantage, regardless of its price category. ■



Switching

Microfinance alleviating poverty in Asia

The concept of microfinance thrives in less developed Asian countries with low rates of national savings and underdeveloped banking networks. Central banks in several Asian countries have commenced regulating microfinance activity. Microfinance in Asia stands apart from traditional lending modes by its adoption of creative funding mechanisms for small enterprises, which help alleviate poverty.

Arjuna Mahendran, Head of Asian Research

Given that Asia includes the most densely populated countries on earth, with the largest number of persons living below the poverty line, it is not surprising that the concept of microfinance as a means of alleviating poverty is firmly entrenched in the region. This is particularly the case for countries in Asia that have grown at a slower rate than their peers. In slower-growing economies, the correspondingly slower expansion of traditional banking and finance institutions has created a vacuum in which microfinance institutions have thrived.

For instance, the People's Republic of China is the only country in the region which has not shown the rapid development of microfinance institutions. While this could be ascribed to the prevalence of interest rate caps and a traditional distrust of the government towards nongovernment organizations (NGOs), it also reflects the fact that China's banking system has grown to be three times larger than that of India (when comparing the total deposit bases of their respective banking systems).

Thus, microfinance activity thrives in relatively poorer countries in South Asia (Bangladesh – home to the famous Grameen bank and the Bangladesh Rural Advancement Committee [BRAC[1]] – India, Pakistan and Sri Lanka), Central Asia (Azerbaijan, the Kyrgyz Republic, Tajikistan) and Southeast Asia (Indonesia, Vietnam and Cambodia). Using the traditional dollar-a-day benchmark of poverty, 690 million people live in poverty in Asia. The Asian Development Bank (ADB) also estimates that if that poverty hurdle rate is raised to two dollars a day, the number explodes to 1.9 billion people living in 380 million households.

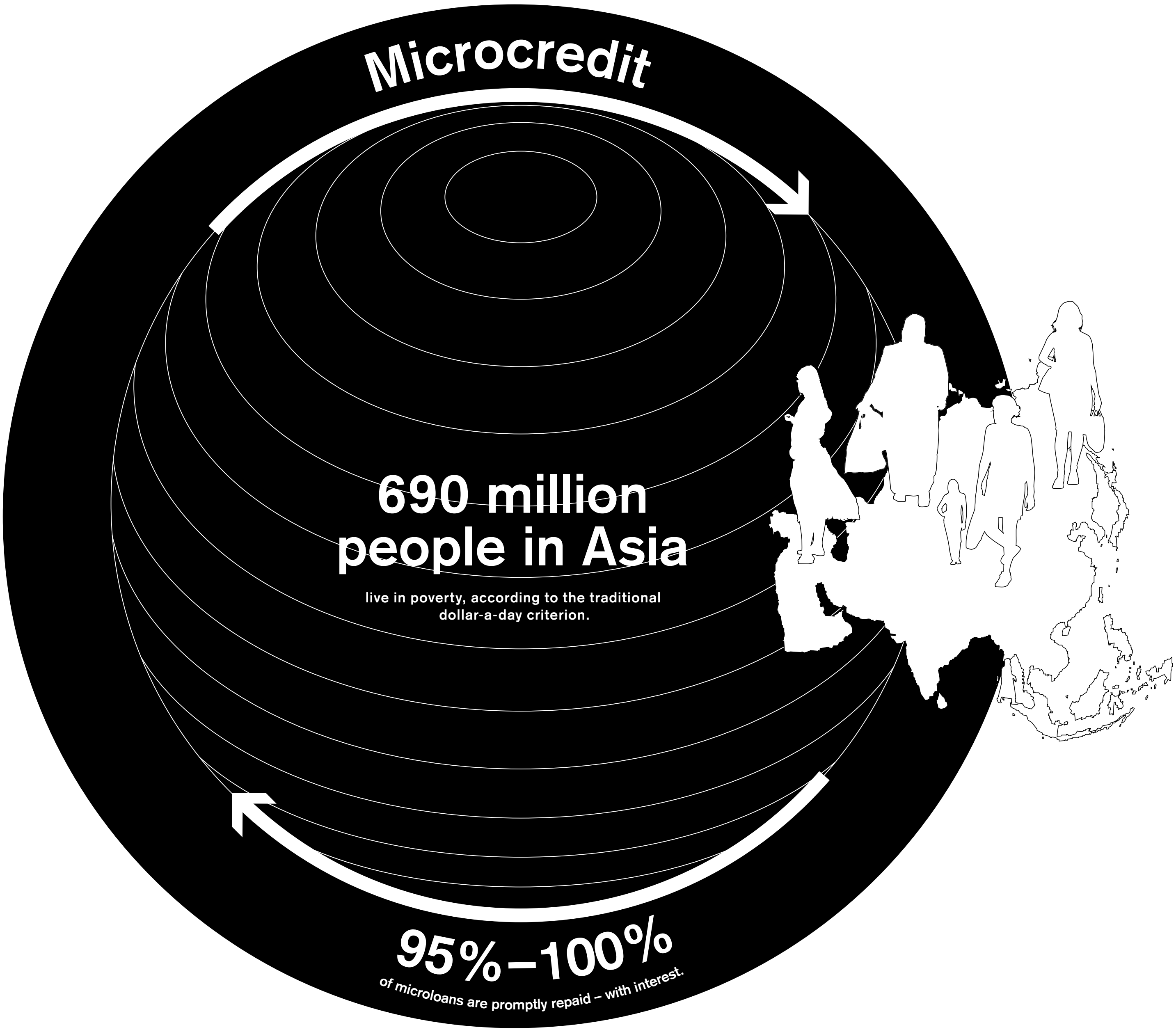
Not surprisingly then, the focus of the rapidly growing microfinance industry in Asia is squarely aimed at the poorer segments of the population who, by virtue of their low incomes, are deprived of access to the organized financial sector. ADB estimates suggest that microfinance can see institutions in Asia account for 41 million loan accounts and 98 million deposit accounts. What this suggests is that microfinance can see many more years of rapid growth.

Recognized as a commercially viable business

Meanwhile, the microfinance industry itself has rapidly undergone a series of changes in its underlying institutional form, its target client groups and its modes of delivery of services. What is driving these changes in Asia, and globally, is the realization that microfinance is a commercially viable business in an environment where increasing rates of economic growth are throwing up opportunities for poorer people, who desperately need access to credit, to emerge out of poverty.

What started in Asia in the 1980s as a mechanism to address the lack of access to credit and other banking services for low-income groups has grown to parallel the traditional banking and financial institutions in size and scope. This is because low-income groups tend to be heterogeneous in their livelihoods, needs, potential and working environment. The rapid growth of transportation and telecommunications infrastructure across Asia in the last decade has prompted microfinance institutions to adapt rapidly to the diverging needs of their client bases. Thus, Asia's poor are joining their affluent peers as they travel and communicate within their countries and across the globe in ever-increasing numbers, throwing up new and unexpected opportunities for microfinance providers.

For example, in the Philippines, mobile telecommunications companies have developed a text-based remittance service that allows overseas Filipino workers in 17 countries to file their remittances back home through their counterpart telecom providers (see also the accompanying article Immigrant banking services on page 48). These developments are enabling microfinance institutions to embark on new forms of activity, such as housing finance ↗



Asia's poor are joining their affluent peers as they travel and communicate within their countries and across the globe in ever-increasing numbers, throwing up new and unexpected opportunities for microfinance providers.

and microinsurance. It has also spurred a staggering percentage increase in the deposit bases of several microfinance agencies. The Association of Cambodian Local Economic Development Agencies (ACLEDA) Bank saw its depositor base grow from 3,826 in 2001 to 57,091 at end-2004, with deposits growing from USD 2 million to USD 32 million in this period.

Microfinance evolving towards traditional banking forms

As a consequence, traditional banking institutions have spotted the potential and are entering the fray **(see figure 1)**. In Indonesia, Bank Rakyat Indonesia has become a major provider of microfinance services while in India, the ICICI Bank has built India's first rural automated teller machines to reach small savers. The ABN Amro Bank has commenced microfinance operations in India.

The rapid proliferation of microfinance institutions across Asia and their burgeoning deposit and credit operations has not gone unnoticed by the regulators. In the 1980s central banks turned a benevolent eye on the lending activities of NGOs involved in microfinance, this was considered more of a charitable activity meant to bring credit to lower income groups. Indeed, many Asian central banks gave interest-free credit to banks to encourage microlending in that period. Over time, however, small banks have entered the microfinance area. This has been enabled by developments in information technology that make it possible to monitor the relatively small loan exposure involved without deploying expensive labor and overheads to administer microfinance schemes.

It is also becoming evident that to sustain microfinance lending programs, economies of scale apply, given the small margins lending institutions make on these loans. Thus, there are two types of lending institutions involved in this activity:

- NGOs and government-subsidized lending institutions relying on donor contributions for their viability
- Banking and non-bank financial institutions with extensive branch networks enabling large amounts of funds to be disbursed to make the activity commercially viable

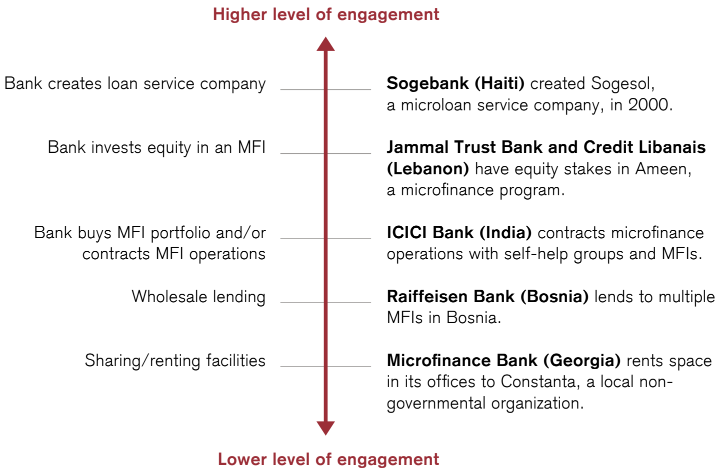
The latter type of institution depends on economies of scale in order to be viable.

Once it became apparent that it was a commercially viable proposition, the proliferation of institutions and money flowing into this activity made governments and regulators think again. Azerbaijan, Cambodia, the Kyrgyz Republic, Nepal, Pakistan, the Philippines, Sri Lanka, Tajikistan and Vietnam have all promulgated legislation recently to regulate and promote microfinance institutions. Looking to the future of microfinance in Asia, it is clear that microlending has become firmly embedded in the mainstream financial sectors of the majority of less developed countries. As this has happened, interest is growing among banks and other financial institutions to tap the vast potential of under-banked low-income populations as per capita incomes rise across the region. Moreover, improved transport and telecoms infrastructures are throwing up opportunities at an unprecedented rate for low-income groups to start small profitable businesses. Asia has a unique combination among developing nations of rapid economic development, high population density and relatively high literacy levels. These factors will ensure that the microfinance industry will continue to grow rapidly for several more years. ■

Figure 1 Source: Consultative Group to Assist the Poor

Forging new links

Traditional banking institutions have recognized the potential and are entering the fray. Commercial banks and microfinance institutions (MFIs) are forming partnerships.



[1] BRAC is one of the largest Southern development organisations working with the twin objectives of poverty alleviation and empowerment of the poor.

Immigrant banking services

Migrant workers sending money back to their families in their home countries now account for nearly a third of total global external finance according to the World Bank. Countries such as the USA, UK, France and Spain face a growing demand for immigrant banking services. In Spain, the number of immigrants has quadrupled in just five years from 2.3% to 8.5% of the population.

Christine Schmid, Equity Sector Analyst

"Sí se puede!" Yes we can do it! With this slogan 500,000 Hispanic immigrants demonstrated on 24 March 2006 in Los Angeles for equal civil rights, including a simplified access to the banking system, mainly for remittances. Not only the United States faces a growing demand for banking for immigrants, but also France, the UK **(see table 1)** or even Spain, where the number of immigrants has quadrupled in just five years from 2.3% to 8.5% of the Spanish population **(see figure 2)**! Globally, the number of people living outside their home countries is estimated to be at 175 million. The remittances sent back to their home countries have been estimated at up to USD 232 billion in 2005. Out of this amount, USD 167 billion is flowing into developing countries. For some recipient countries – mainly in Africa – remittances can be as high as a third of GDP **(see figure 1)**. The World Bank estimates that, in Somalia, remittances were up to 40% of GDP in the late 1990s. Remittances also now account for about a third of total global external finance and seem to be even countercyclical as the amount sent home normally increases when the destination economy is in a downturn. Remittances are an effective way of supporting emerging market economies as they directly target their final destination, thus providing a more efficient way of reducing poverty than many official aid channels. The G8 action plan (Iceland, 9 June 2004) highlights the priorities for the remittance market including:

- Better access to formal financial systems for both senders and receivers
- Lower costs (more favorable exchange rates and fees) for remittance services by increasing competition through the use of innovative payment instruments and enhanced access
- Increased cooperation between remittance service providers and local financial institutions, including microfinance entities and credit unions

On 13 March 2006, the Bank for International Settlements (BIS) published detailed general principles for international remittance services. The BIS defines remittances as cross-border person-to-person payments of relatively low value. While the BIS anticipates that the remittance market will need to be regulated for various reasons including prevention of misuse for purposes such as money laundering or terrorist financing activities, it argues that the regulation framework should be predictable, nondiscriminatory and proportionate in order to contain costs. This applies to financial (i.e. banks and money transfer operators) and nonfinancial institutions (technology and telecom providers). To meet the FATF

Source: BBVA

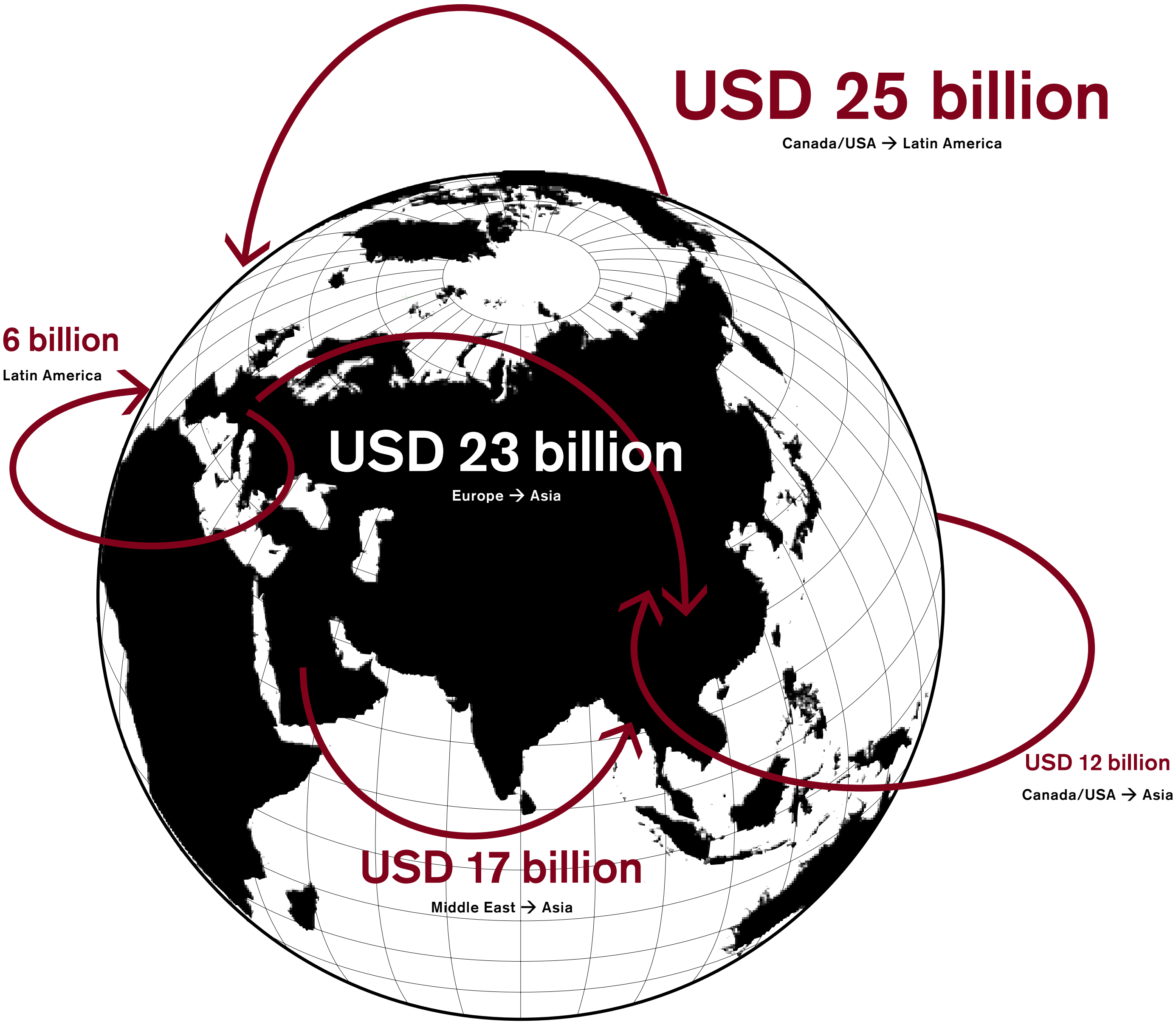


Figure 1: Globally, the number of people living outside their home countries is estimated to be 175 million. The remittances sent back to their home countries have been estimated at up to USD 232 billion in 2005. The main receivers are Latin America and Asia. For some recipient countries, remittances can be as high as one third of GDP.

(Financial Action Task Force on Money Laundering) recommendations, remittance service providers have to be licensed or registered, and be able to transfer the originator information (name, address and account number) attached to the funds transferred.

A new decade of money transfer in developed countries

One example of payment via cell phones is the system developed by the Philippine telecom company, which has recruited remittance service providers (RSPs) in foreign countries that have significant Philippine communities. The immigrant worker in Singapore, for example, pays cash to one of the RSPs, who in turn sends a secure text message to the cell phone of the receiver in the Philippines. The e-money on the receiver cell phone can be cashed at an RSP agent or forwarded to another destination in the Philippines. Settlement between the sending RSP and the telecom company, and between the telecom company and the Philippine agent, is carried out via the usual banking channels to ensure that the regulations regarding money laundering are met and to simplify the currency translation. But neither party is required to have a bank account. Since the process is still fairly complicated, the Philippine authorities are regularly organizing information days for future emigrants outlining the remittance process and steps to be taken before leaving the country. The Philippine model might well be the future for African countries, as the number of cell phone users is increasing dramatically from the current low level, thus setting the basis for payments via cell phones.

The latest example is PayPal Mobile's initiative (PayPal belongs to Ebay) in the USA, Canada and the UK aimed at expanding in 55 countries. The service for consumers includes purchases or money transfers using text messaging via cell phones. PayPal could become a significant future payment system in the traditional retail world. For further information regarding telecom companies and the change in technology please refer to the investment idea of 23 March 2006 by our telecom specialist Uwe Neumann: "Cell phone billing systems must stretch across the board."

Paving the way for more efficient money transfer

SWIFT Net is a new nonproprietary version of SWIFT that uses TCP/IP, the protocol used for the Internet. TCP/IP could lower maintenance costs and usage costs for the banks, thus making the platform more viable for managing small transactions. This would reduce the costs for banking partnerships in key countries, such as the existing partnership between Lloyds TSB (UK) and ICICI (India). The aim is clearly to extend the joint product range beyond today's remittance products in the future. Furthermore, the trend in paying via cell phones, including settlement over banks, could increase in developed countries, providing an easier and faster way of payment for the consumers and billing for the SMEs. Banks with a clear focus on innovation, the appropriate size in retail banking and an efficient IT infrastructure could be the winners in combination with the telecom providers, as they are less likely to want to provide all the procedures related to the money laundering regulations.

Further pressure on traditional money transfer operators

New remittance tools based on cell phones, smart cards or the Internet are putting pressure on the traditional Money Transfer Operators (MTOs) such as Western Union (which belongs to First Data Corp.). In Mexico, for example, competition has spurred a reduction in fees in the US-Mexican corridor. Fees for sending

Figure 2 Source: BBVA, INE

The world is changing

Globally, the number of people living outside their home countries is estimated to be at 175 million.

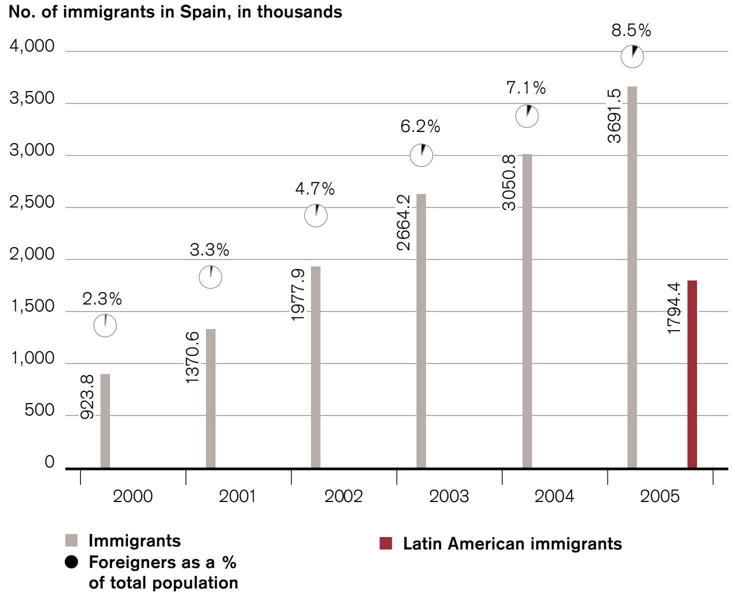


Table 1 Source: DFID Migrant Remittances Vol. 2 No. 1

Remittance country partnerships

Remittances also now account for about a third of total global external finance. They are an effective way of supporting emerging market economies as they directly target their final destination.

Source nation	Leading destination nations
Canada	India and Jamaica
France	Morocco, Mali and Senegal
Germany	Turkey
Italy	Morocco
Japan	Philippines and Malaysia
UK	Bangladesh, Nigeria and Ghana
United States	Philippines and Mexico

USD 300 have fallen by 56%, from USD 26 (9%) in 1999 to USD 11.50 (4%) as of 2006. In this case, commercial banks in both countries, such as the Spanish group BBVA, have recently started providing remittance services for an all-inclusive fee. For MTOs, the cost pressure could intensify in the future. In contrast, private equity firms have started to indicate their interest in MTO companies. Since the remittance market is young and immature, this provides good opportunities for private equity investments, even if transfer prices are coming down further from the current exceptionally high levels. For example, Apax Partner bought Travelex in February 2005. As banks start to show an interest in this new segment, there may be a need for well-known brands in that field. The use of own brands for immigrant banking could limit the original branding value. BBVA, for example, introduced Dinero Express at the beginning of 2005.

Banks to benefit from the trend: BBVA (BUY)

First, in November 2005, BBVA announced it would cut tariffs on immigrant services in Spain by 60%. The aim is to increase immigrant customers by 50% to 600,000 in one year! Cuentas Claras Internacional is the answer to immigrants' needs with respect to money transfer, easy access to credit and repatriation insurance. For EUR 25 per month, immigrants will be able to conduct all their typical domestic banking operations, such as opening two current accounts, obtaining a Diez card, using the ATMs and arranging money transfers including repatriation insurance. They can also sign up for the cell phone service. In addition, they will benefit from a new line of nonfinancial services, including emergency assistance in the home (as they may not have health insurance), legal advice and consumer protection. BBVA is expecting to double its present market share of remittances out of Spain to 20%.

One year after the introduction of the Dinero Express brand, the group has opened 40 branches, with 26,000 client applications, 163,000 payments, 760,000 telephone calls and EUR 10 million in loans granted. The end model will be based on BBVA's branch network (Spain, California, Texas), the Dinero Express network in Spain (currently in investment mode and therefore loss-making) and Bancomer Transfer Services owned by BBVA (FY 2005 earnings: USD 50 million), which is currently the leader in Latin America (USA-Mexico corridor 2005: 19,064 transactions, USD 7.439 billion transaction volume **(see figure 3)**. BBVA is present in 26 countries including several in Asia, with 42 brands and 21,000 access points. The main benefit for BBVA is clearly not the transfer services, but the opportunity to increase cheap funding thanks to a rising deposit base, as well as the potential of these new clients to be normal retail banking customers in the future. ■

Figure 3 Source: BBVA

Bancomer Transfer Services

BTS (FY 2005 earnings: USD 50 million) is currently the leader in the US-Mexican channel. The main benefit is not the transfer service, but the opportunity to increase cheap funding and potential new retail clients.

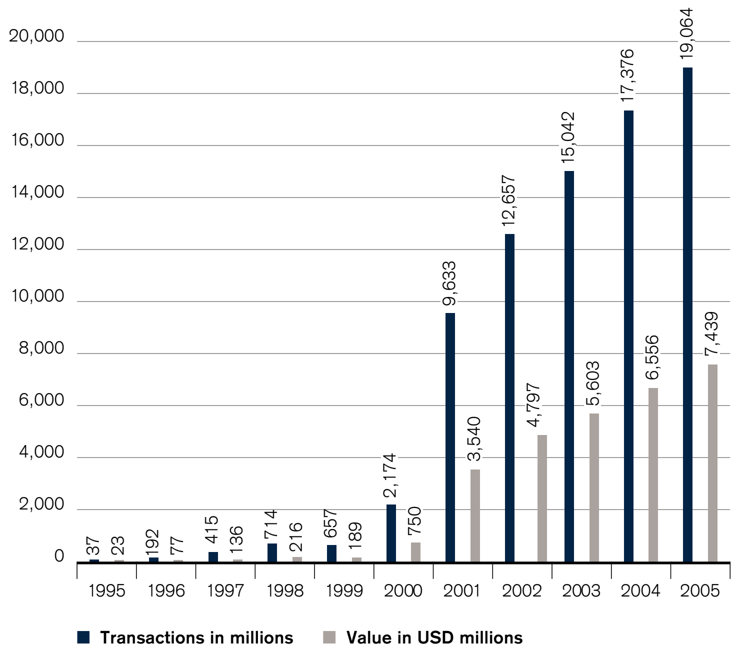


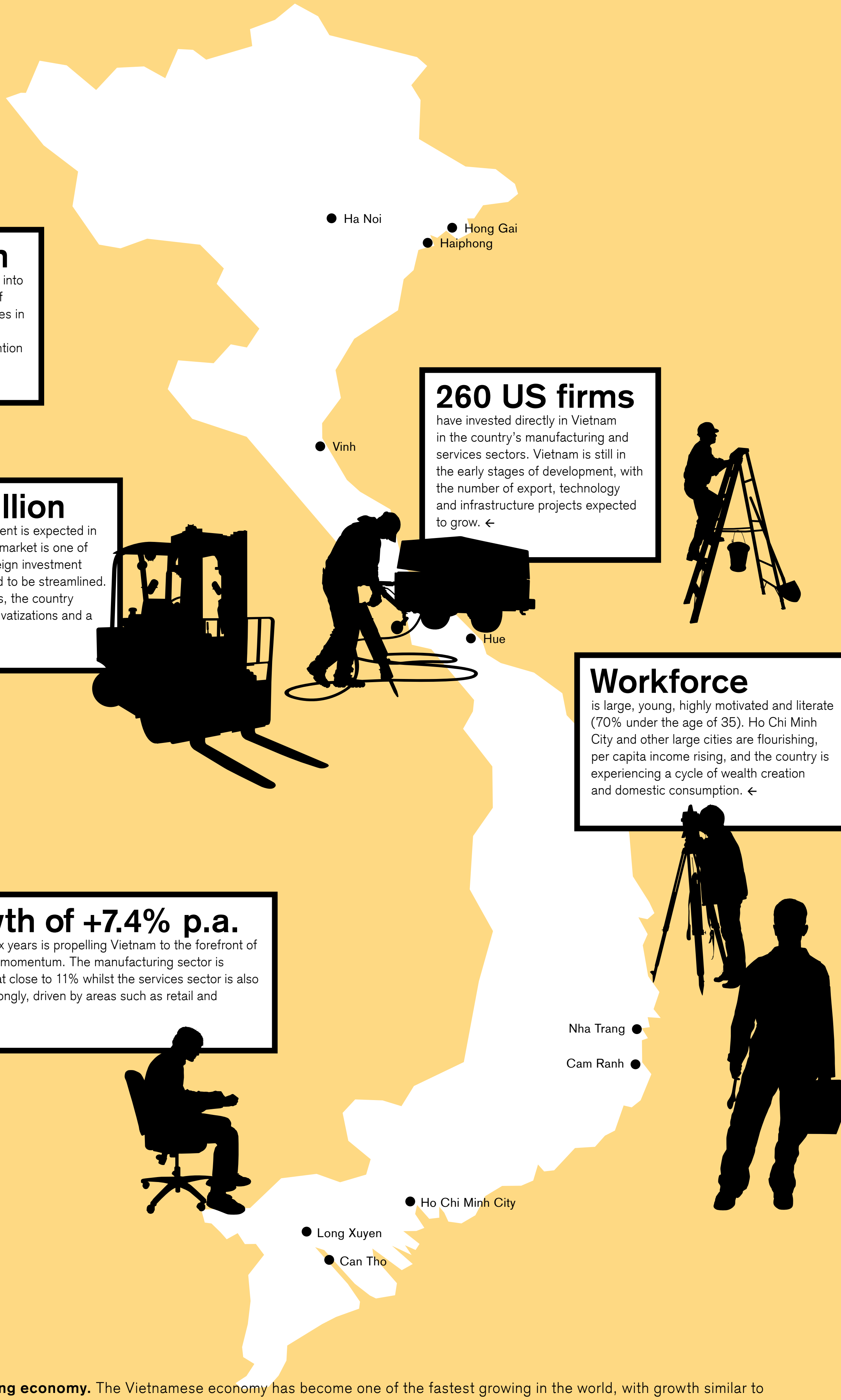
Table 2 Source: Credit Suisse

Further beneficiaries:

- Citigroup (BUY)
- HSBC (BUY)

Important documents and links:

- BIS: General Principles for International Remittance Services, March 2006
- Financial Action Task Force on Money Laundering (FATF): The Forty Recommendations, revised October 2004
- USAID DFID: Migrant Remittances, Vol. 2, No. 1, April 2005
- World Bank: Remittances: Development Impact and Future Prospects, 2005
- www.bbvadineroexpress.com



USD 5 billion

of foreign direct investment flowed into Vietnam in 2005. Vietnam is one of the last frontier emerging economies in Asia open to foreign investments, likely to draw serious investor attention over the next decade. ←

USD 6 billion

in foreign direct investment is expected in 2006. Vietnam's equity market is one of the newest in Asia. Foreign investment regulations are expected to be streamlined. Over the next 24 months, the country should see a flurry of privatizations and a number of big IPOs. ←

260 US firms

have invested directly in Vietnam in the country's manufacturing and services sectors. Vietnam is still in the early stages of development, with the number of export, technology and infrastructure projects expected to grow. ←

Workforce

is large, young, highly motivated and literate (70% under the age of 35). Ho Chi Minh City and other large cities are flourishing, per capita income rising, and the country is experiencing a cycle of wealth creation and domestic consumption. ←

Growth of +7.4% p.a.

for the past six years is propelling Vietnam to the forefront of Asia's growth momentum. The manufacturing sector is now growing at close to 11% whilst the services sector is also picking up strongly, driven by areas such as retail and tourism. ←

Asia's second fastest growing economy. The Vietnamese economy has become one of the fastest growing in the world, with growth similar to the vigorous pace of India and China. GDP growth is second only to China within non-Japan Asia and one of the fastest worldwide. The macroeconomic foundations and legal infrastructure have been laid, and WTO membership is imminent.

Vietnam at the growth frontier

Vietnam is Asia's second fastest growing economy after China. It has also become a magnet for foreign capital. The macroeconomic foundations and legal infrastructure have all but been laid, and growth in the country's manufacturing and services sectors is resulting in an exceptional cycle of wealth creation and domestic consumption. Vietnam's equity market is one of the newest in Asia.

Etrita Ibroci, Trading Analyst

The energy shimmering off the streets of Ho Chi Minh City is palpable, as is the sense that finally this country's time in the sun has come. Vietnam is one of the last frontier emerging economies in the region open to foreign investments that will demand serious investor attention over the next decade (Cambodia and Myanmar are in a less advanced situation, but offer no listed investment vehicles). The Vietnamese economy has become one of the fastest growing in the world, with growth similar to the vigorous pace of India and China. In 2005 alone, foreign direct investment (FDI) to Vietnam totaled over USD 5 billion. Already, about 260 US firms have invested directly in Vietnam. In 2006, another USD 6 billion is expected, more than 10% of GDP. This includes major export, technology and infrastructure projects. We estimate that Vietnam offers some of the same appeal as China with a ten-year delay and on a smaller scale.

The key underlying drivers of sustainable long-term growth propelling Vietnam to the forefront of Asia's growth momentum are: (1) a large, young, highly motivated and literate workforce: 70% of the population is under 35, (2) capital markets gaining critical mass in 2006, (3) based on Credit Suisse estimates, per capita income was USD 635 as of end-2005 and is on track to reach USD 1000 by 2010, assuming GDP growth is sustained at 8% or better, (4) a vibrant and rapidly growing economy: GDP growth has averaged 7.4% for the past six years, one of the fastest worldwide (eighteenth in the world); (5) accelerating foreign direct investment, (6) the prospect for WTO entry by 2007; (7) opportunities to develop tourism more significantly, as this has become one of the government's priorities; (8) potential for capital inflows from external portfolio investors (especially from Japan), as confidence in the government's reforms grows, and (9) wide-ranging infrastructure programs.

Reform led by preparations for accession to the WTO

The Vietnamese economy has been dramatically transformed since the "Doi Moi" policy initiated in the mid-eighties. Today, Vietnam has much sounder macroeconomic foundations. A continuation of the reform path is being led by preparations for the expected WTO accession this year. Most of the focus is on legal clarifications for business operations of foreign-owned enterprises and joint ventures, as well as establishing property rights law. Amendments to the Enterprise Law, the Land Law and the Securities Law are due for approval this year, while further measures should be initiated once the WTO accord is finalized. According to USAID, Vietnam is probably near completion in terms of legal infrastructure at this point in its development, with most of the basic legal, ownership and capital regulations in place – the only remaining question mark is the inadequate stress testing of these laws and proper enforcement by local courts.

Official statistics from the Vietnamese government confirm that economic growth in 2005 registered 8.4%, which is just below China's 9.9% GDP growth **(see table 1)**. Even more startling, however, is how this pace of strong economic growth over the past four years is now sparking a very profound cycle of domestic consumption. With wealth being created at a very fast pace, the young, newly affluent population is engaging in a wave of consumption in both durable and nondurable goods to mimic Western habits. This is a completely new phenomenon. For instance, until recent times, living in a condominium was considered below living in a farm (as condominiums were associated with Communist era social housing). In the past years, young professionals in Ho Chi Minh City have developed a craze for expensive air-conditioned apartments. This has been further supplemented by government plans to spend close to USD 140 billion in infrastructure programs, including large-scale tourist resorts. The manufacturing sector is now growing at close to 11% whilst the services sector is also picking up strongly, driven by areas such as retail and tourism. The weakest spot in the economy has been agriculture, which grew at around 4% last year, as output was constrained by drought and the adverse impact of avian flu. However, growth in both investment and consumption has more than taken up the slack.

Privatization program driving expansion of the equity market

The Ho Chi Minh Exchange began in July 2000 with Hanoi following some five months later. Progress has been slow but steady. While the ratio of market capitalization to GDP is only 4%, we believe the government's target of 15% by 2010 can be reached, even though this would still be low by Asian standards (the regional average is closer to 130%). However, we believe a slew of privatizations over the next 24 months should dramatically expand this figure and bring Vietnam closer to inclusion in regional benchmarks. The privatization program that is underway (similar to what we have seen in Pakistan) has the potential to meaningfully expand the breadth and depth of this market over the next four to five years. Equitization is primarily being driven by the government's effort to modernize and upgrade its state enterprise sector. Development of the domestic capital market is viewed as a critical component in facilitating this industrial transition.

The government has also introduced new securities-related legislation that we will be hearing more about over the next six months. The new Enterprise Law is due to come into effect from July 2006, and this will require that all state-owned enterprises are incorporated within four years. This is likely to further set the stage for a sustained privatization stream over the next few years. This process of privatization will also broaden and deepen the index, extending it from financials into telecoms and energy. Meanwhile, real estate should also benefit from last year's new land law, which offers a lease of 70 years, and is more attractive than Chinese laws offering foreigners only a 50-year lease. Foreign investment regulations are expected to be streamlined to attract overseas institutions, while the government may also use dual listing and ADR/GDR options to increase international liquidity.

Foreign direct investment has been steadily picking up

The Japanese have been among the largest investors, with USD 590 million committed last year and a cumulative total of USD 4.5 billion. Other key sources have been Korea, Hong Kong, Taiwan, and Singapore. The most telling announcement yet was made in the last week of February. The Vietnamese government approved Intel's plans to build the biggest single technology project in the history of Vietnam – a chip assembly plant in Ho Chi Minh City,

Table 1 Source: Credit Suisse

GDP growth (in %)

Official statistics from the Vietnamese government confirm that economic growth rose to 8.4% in 2005, which is just below China's 9.9% GDP growth.

GDP growth, in %	2003	2004	2005	2006F	2007F
China	10.0	10.1	9.9	10.1	9.7
Vietnam	**7.3**	**7.8**	**8.4**	**8.6**	**9.3**
India	8.3	8.5	8.1	8.5	8.5
Singapore	2.9	8.7	6.4	7.0	6.0
Malaysia	5.3	7.1	5.3	5.4	5.1
Philippines	4.5	6.0	5.1	5.3	5.6
Indonesia	4.7	5.1	5.6	5.0	6.0
Hong Kong	3.2	8.6	7.3	5.0	3.8
Taiwan	3.4	6.1	4.1	4.9	4.0
Korea	3.1	4.6	4.0	4.7	4.2
Thailand	7.0	3.2	4.5	4.7	5.0

an investment that could cost as much as USD 605 million. While the country had attracted investments from a diverse range of companies, including Sony Corp. of Japan and Samsung of South Korea, none comes close to Intel's plans. The attraction? Per hour salary levels are very attractive, while the workforce benefits from a good education level and is highly motivated and keen on working in a competitive private sector. Much of what is happening in China is only beginning in Vietnam. Recently, the state-owned Vietcombank announced plans to list its shares in Hong Kong or Singapore. This would be Vietnam's first overseas initial public offering. And several Western banks are taking minority positions in Vietnamese banks, anticipating future IPOs and growth. The market has a long way to go before it approaches the likes of even China in terms of developed equity and bond markets, with some semblance of disclosure. Nonetheless, all great journeys begin with a humble first step. Vietnam is on its way.

Banks, funds and companies geared to growth

Opportunities for direct accumulation of equities exist in both the over-the-counter (OTC) as well as listed markets. However, a more diversified way to play on the longer-term prospects is to invest via a number of domestically run funds. The banking sector is also a sound way to play the Vietnam growth story, as consumers gain an appetite for credit, infrastructure needs are addressed and the private sector looks to fund its capital expenditure. Future bank IPOs will be key to developing the embryonic equity markets, led by Vietcombank, ACB and Sacombank. In terms of direct investing, we would also focus on Vietnam funds with a proven track record in managing risk in this attractive market. Finally, an indirect way to play Vietnam could be to invest in companies that are geared to growth in Vietnam (focusing on Japanese and Asian companies) such as Yue Yuen, Keppel Land, Singapore Airlines, Siam Cement, Amata, just to name a few.

There are several risks that we see for investors in Vietnam. One of them would be capital capacity constraints to absorb enough investment flows. Were growth to decelerate sharply, social tensions might arise since Vietnam needs to grow by about 7% per annum merely to be able to absorb the estimated 1.4 million people entering the workforce every year. Some additional risks to keep on the radar screen include a delayed entry to the WTO, corporate governance, and property market pressures (especially since the real estate market has gained some 1,000% in the past four years). ■

Table 2

Source: Standard & Poor's, Moody's, Fitch and Ministry of Finance of Vietnam, Credit Suisse

Favorable comparison with rated peer group

Vietnam possesses strong economic fundamentals relative to its international peers, some of whom have been upgraded over the past year.

Region	S&P	Moody's	Fitch	Real GDP growth (%)	Inflation (% YoY)	Fiscal deficit (% GDP)	Gross gen. govt. debt (% GDP)	Gross ext. debt (% CAR)	Net borrowing/ CAR (%)	Current account balance (% GDP)
Vietnam										
2005E				8.4	9.6	0.2	31.5	41	5.0	(1.1)
2004A	BB–/Pos	Ba3–/Sta	BB–/Sta	7.7	8.3	1.7	34.5	48	5.0	(2.0)
2003A				7.2	3.2	1.8	37.3	57	4.8	(4.9)
Egypt	BB+/Sta	Ba1/Sta	BB+/Sta	3.7	5.5	(2.3)	106	140	(12.2)	8.0
Russia	BBB–/Sta	Baa3/Pos	BBB–/Sta	6.5	11.5	0.6	36	140	(16.4)	5.4
El Salvador	BB+/Sta	Baa3/Sta	BB+/Sta	4.1	2.0	(2.9)	40	117	1.7	(2.8)
Romania	BB+/Pos	Ba1/Pos	BBB–/Sta	5.5	12.5	(2.4)	24	79	10.4	(6.7)
India	BB+/Sta	Baa3/Sta	BB+/Sta	6.5	4.5	(9.4)	84	100	(11.9)	0.3
Colombia	BB/Sta	Ba2/Neg	BB/Sta	3.9	6.0	(4.1)	52	204	5.9	(1.6)
Philippines	BB–/Sta	B1/Neg	BB/Sta	4.2	2.8	(4.2)	92	121	(3.6)	0.5
Peru	BB/Sta	Ba3/Sta	BB/Sta	4.0	2.5	(1.4)	42	247	7.6	(2.1)

Investing in the EU enlargement process

In our view, investing in new EU member states, as well as acceding countries and candidates, still presents some interesting opportunities. A positive Polish zloty outlook in combination with an expected positive performance in the office and retail property markets makes Polish real estate investments look attractive. While equity markets in Eastern Europe appear expensive, bonds and real estate in Romania are set to benefit.

Sven Schubert, Foreign Exchange Analyst

The EU enlargement process has already boosted Eastern European equity, bond, forex and real estate markets. In general, equity markets look rich in Emerging Europe and only a few sectors still look attractive. Bond and real estate markets also experienced a rally. Nevertheless, we see further potential in certain parts of the real estate sector; for example, in Romania and Poland. On the currency side, the Polish zloty and the Czech koruna look attractive. Global liquidity plays an important role for nearly all asset classes. We believe that global conditions should remain robust in 2006. Nevertheless, risk rotation should encourage more selective behavior from international investors in favor of strong fundamentals. A significant fall in liquidity due to a shift in sentiment and a drop in the risk appetite of global investors cannot be ruled out, although we think the likelihood of this is limited in 2006, as the pause in the hiking cycle in the USA and EU is evident. Furthermore, a recent IMF study shows that institutional investors are focusing more and more on local markets within the emerging market economies. This has two very important positive effects for local investors. First, these investments help to develop underdeveloped markets, as they create a substantial amount of liquidity. Second, flows from institutional investors should be much more sustainable and stable because of their longer investment horizons.

Foreign exchange affected by external and internal balances

External and internal balances play an important role in determining the future path of exchange rates. The need to fulfill the Maastricht criteria **(see table 1)** helps to strengthen those balances in the Czech Republic and Poland and, to a lesser extent, in Hungary **(see figure 1)**. Hungary should follow the path of fiscal consolidation with somewhat of a lag. The elections to take place in the Czech Republic (in June), together with the recent forming of a coalition in Poland, could create the basis for further improvement in budget balance deficits, and we therefore expect foreign exchange volatility to shrink in the aftermath of the elections. The Hungarian forint is still the most vulnerable currency in 2006, with a high current account and budget balance deficit. The recent elections, in which the former government was reelected, should not be seen as a guarantee for a significant improvement of the national budget

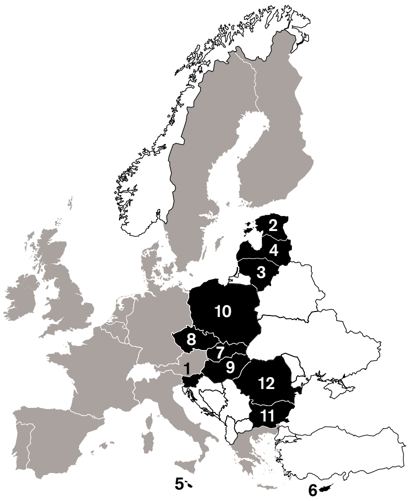


Table 1: Maastricht criteria and country performance

The introduction of the euro requires each individual country to comply with the Maastricht criteria: 1) The moving 12-month average rate of inflation may not exceed by more than 1.5 percentage points the moving 12-month average of the three best-performing Member States. 2) The 12-month average long-term interest rates may not exceed by more than 2 percentage points the 12-month average interest rate of the three best-performing member states. 3) The government deficit may not exceed 3% of GDP. 4) The ratio of government debt to GDP may not exceed 60%. 5) Exchange rate stability must be maintained, with a required minimum two-year membership in the European Exchange Rate Mechanism II without severe tensions. The indicators for each country are listed in the respective space, whereby a red dot signifies that the country does not satisfy the criterion. The reference rate for inflation is currently at 2.6% and 5.3% for long-term interest rates.

● Yes
● No

	Entered/ Possible entry (2004–2012)	Probable accession to the euro zone	Inflation: Average of the last 12 months[1] Max. 2.6%	Long-term interest rate: Average of the last 12 months[2] Max. 5.3%	Budget surplus/deficit: 2005 Max. –3% of GDP	Public sector debt: 2005 Max. 60% of GDP	Exchange rate stability: 2006[5]
Slovenia (1)	Entered: 28/06/2004	2007	Yes 2.4	Yes 3.8	Yes –1.8	Yes 29.1	No
Estonia (2)	Entered: 28/06/2004	2007/2008	No 4.1	Yes 4.0	Yes 1.6	Yes 4.8	No
Lithuania (3)	Entered: 28/06/2004	2007/2008	No 2.8	Yes 3.7	Yes –0.5	Yes 18.7	No
Latvia (4)	Entered: 02/05/2005	2008	No 7.0	Yes 3.8	Yes 0.2	Yes 11.9	No
Malta (5)	Entered: 02/05/2005	2008	Yes 2.6	Yes 4.5	No –3.3	No 74.7	No
Cyprus (6)	Entered: 02/05/2005	2008	Yes 2.0	Yes 4.8	Yes –2.4	No 70.3	No
Slovakia (7)	Entered: 25/11/2005	2009	No 3.1	Yes 3.5	Yes –2.9	Yes 34.5	No
Czech Rep. (8)	Possible entry: 2008	2010	Yes 1.8	Yes 3.5	Yes –2.6	Yes 30.5	No
Hungary (9)	Possible entry: 2009/2010	2012	No 3.2	No 6.5	No –6.1	Yes 58.4	No
Poland (10)	Possible entry: 2009/2010	2012	Yes 1.6	Yes 5.1	Yes –2.5	Yes 42.5	No
Bulgaria (11)	Possible entry: 2009/2010	2012	No 6.1	Yes 3.6	Yes 1.3[4]	Yes 38.9[4]	No
Romania (12)	Possible entry: 2009/2010	2012	No 9.0	No 8.7[3]	Yes –1.4[4]	Yes 18.5[4]	No

Source: Eurostat, National Banks

[1] To March 2006, [2] To February 2006, [3] To September 2005, [4] 2004
[5] At least two years member of ERM II and within fluctuation band of +/–2.25%

situation. Due to the high fiscal deficit, we expect the EMU accession of Hungary in 2012 to be postponed **(figure 1)**. Nevertheless, the external accounts of countries like Poland, Hungary or the Czech Republic have already benefited from those countries being EU members. Their geographical position within Europe makes them attractive for international export-oriented companies. Owing to lower labor costs and a highly qualified labor force, international companies are investing in those countries.

The Czech Republic, for example, experienced huge foreign direct investments in its automotive industry. This process is likely to go on and should bring about further appreciation of the koruna. Prudent fiscal and monetary policies have brought down inflation in nearly all of these countries. In our view, the inflation outlook for 2006 seems optimistic in the Czech Republic, Poland and Hungary, due to their export-driven growth structures. Nevertheless, the historically low interest rates should further accelerate interest-rate-sensitive GDP components in 2006 to result in modest inflation pressure later this year. **Figure 2** highlights the already strong performance of GDP leading indicators, which we anticipate will accelerate further. Local currencies in Poland and the Czech Republic should be supported by strong growth in 2006.

Bonds attractive in Eastern Europe in the long term

Bond investments still seem attractive in some Eastern European countries, in our view. The tremendous development of several fundamentals, driven by the cooperation with the International Monetary Fund, makes us believe that the Turkish story is not only dependent on aspirations of EU membership. Nevertheless, a faltering EU convergence process (e.g. the Cyprus issue) would subject the Turkish asset classes to a correction, but this correction should bring more attractive entry levels for long-term investors. Markets should ultimately recompense macroeconomic improvements, which we expect in the coming years (falling inflation, robust growth and fiscal consolidation). Any correction occurring during 2006 as a result of a faltering EU convergence process should be viewed as an attractive entry level on a long-term horizon.

Romania is also attractive, in our view. Nevertheless, fiscal policy could come under pressure slightly in the next two years due to spending commitments made during the accession talks with the EU. This could force the consolidated budget balance to increase to a moderate –1% in terms of GDP in 2006. Foreign direct investment (FDI) is financing 75% of the high current account balance deficit (expected –9% in terms of GDP). In combination with the accumulation of foreign reserves of USD 20 billion, the forex risk to a sentiment change on the part of foreign investors seems limited to us. The Central Bank of Romania has recently gained credibility in fighting inflation. Monetary policy forced inflation down from more than 28% in 2000 to 8.5% in February 2006. In line with this development, the National Bank of Romania policy rate came down by 2990 basis points. We are optimistic that inflation will drop further in late 2007 into the inflation tolerance band of 3%–5%.

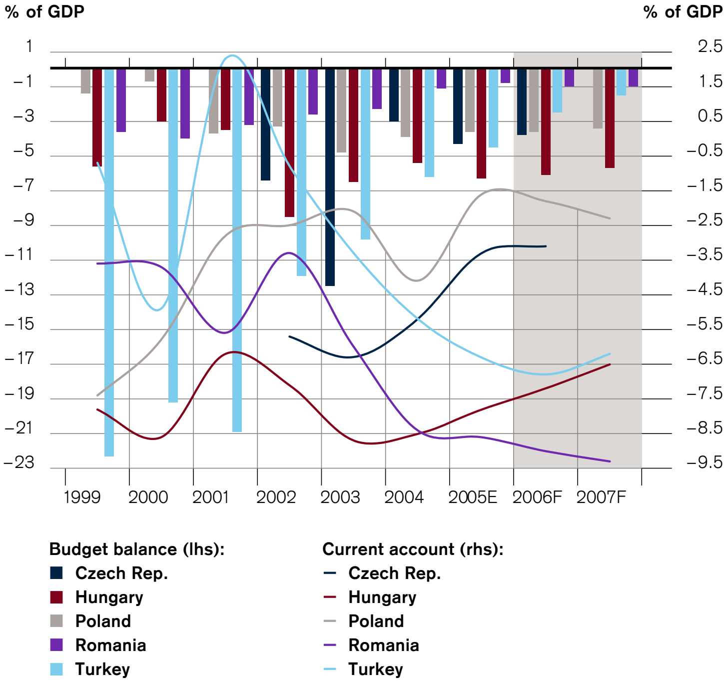
Equity investments: Neutral on Central Europe

We have turned neutral on Central Europe. The growth story is probably already priced into equity prices to some extent in Central Europe, but has a long way to go in Russia and Turkey. In Russia, the boom unleashed by high oil and gas prices should in all likelihood support a multiyear stock market uptrend, despite some

Figure 1 Source: Bloomberg, Datastream, Credit Suisse

Country forecasts: Budgets and current account balances

The need to fulfill the Maastricht criteria helps to strengthen balances in the Czech Republic and Poland and, to a lesser extent, in Hungary. Hungary should follow the path of fiscal consolidation with somewhat of a lag.



recurring uncertainties on the political side. We are adopting a cautious stance on Turkish equities in the short term, due to the gaping current account deficit at a time when central banks are reducing the curtailing free liquidity growth. Over the medium term and barring major fallout with the EU, we are still convinced that the Turkish market should thrive on the back of the economic and political convergence with the European Union. The Turkish economy is establishing itself as a low-cost production base for Western Europe, and its relatively young population is resulting in the emergence of a middle class, which should boost the consumer and financial sectors. Moreover, the ongoing privatization process will bring a reasonable FDI inflow in 2006, helping to finance the current account deficit. Taking into account the introduction of a capital gains tax, effective from 1 January 2006, and the related identity disclosure rules for owners of Turkish securities, we advise clients to invest in mutual funds or structured products, which are subject to the tax (as a deduction of NAV) but bypass the identity disclosure rule.

Real estate: potential in less developed markets

Commercial real estate markets (office and retail properties) in Eastern Europe have displayed extremely positive momentum in recent years. High economic growth has not only prompted greater need for retail and office space, but also has resulted in an increase of foreign investment in real estate in Eastern Europe[1].

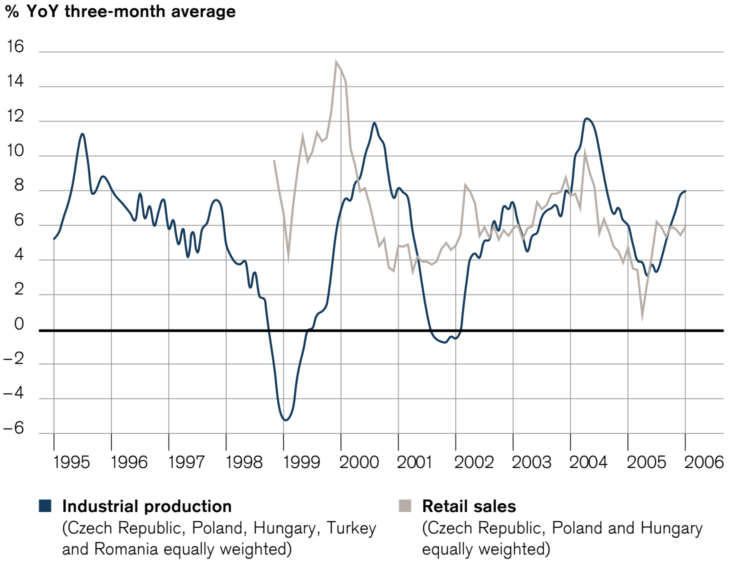
The lion's share of investors has, however, focused on the capital cities of the new EU member states (Budapest, Prague and Warsaw). Purchasing prices for office and retail properties have therefore already increased significantly in these cities and now correspond to yields of around 6.5%–7.5% (some years ago they were above 9%). Among these more developed markets, we particularly favor investments in Poland, given the fact that the economic catch-up potential is greatest in that country. The office and retail property markets in Poland will likely record a positive performance in the years ahead.

We see a higher potential for real estate investments in less developed real estate markets such as Romania and Turkey. Yields for office and retail properties in these two countries are around 9%–12%. Sustained higher yields on these investments, together with positive growth momentum in Turkey and the accession of Romania to the European Union, should boost foreign investments in these countries. Therefore, we expect real estate sales prices to increase in these two countries in the next few years with downward pressure on rental yields. This should generate capital appreciation of real estate investments in these countries. ■

Figure 2 Source: Bloomberg, Datastream, Credit Suisse

Leading Eastern European indicators

Leading GDP indicators have performed strongly to date (three-month average, year-on-year), with further acceleration anticipated. Strong growth should support the Czech koruna.



[1] See our Research Flash: Global Real Estate "Go East", Zurich 11/01/2006. Note: local law or regulations may restrict the distribution of research reports into certain jurisdictions.

Andromeda: Powerful portfolio analytics

Credit Suisse has introduced a financial planning and portfolio optimization software tool that allows financial advisors to generate optimal portfolio solutions based on their clients' personal situations and financial goals. **Cédric Spahr**, Equity Strategist

Modeling your optimal portfolio

Modern portfolio theory was invented by Harry Markowitz in 1952 and probably represents one of the most lasting achievements in financial market research in the twentieth century. Its basic tenets are that, over long periods of time, investors can only achieve higher returns if they accept more risk – but that can be reduced through diversification. Consequently, investors should first determine which kind of risk and return combination best matches their wealth targets and corresponds to their level of risk tolerance. Second, they should strive to exploit the advantages of portfolio diversification to the fullest extent by choosing an asset allocation that belongs to the set of efficient portfolios.

Tailor-made portfolio structuring

Unfortunately, private clients have generally had limited access to portfolio optimization advisory services. Credit Suisse has now introduced a financial planning and portfolio optimization software tool, called Andromeda, that allows financial advisors to design genuine optimal portfolio solutions for their clients. This suite boasts a number of portfolio analysis tools. Investors can perform "what-if" scenarios by changing their asset allocation between equities, bonds and other asset classes and a volatility analysis to discover how much marginal volatility each portfolio position contributes. A "volatility heat map" displaying the different volatility levels of the portfolio assets supplements the volatility budgeting function. A "stress-testing" function makes it possible to replay the impact of major financial crises such as 11 September 2001 **(see figure 1)**, the Russian/LTCM default in 1998 or the bursting of the tech bubble in 2000. The wealth forecast features show the likely evolution of the portfolio value over the projected horizon. All these functions are supported by attractive graphic effects.

Financial planning and optimization

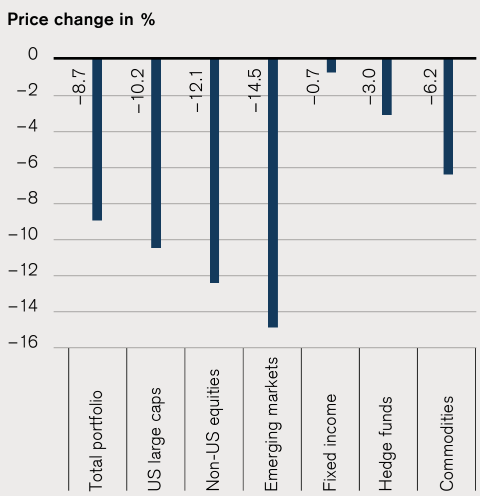
Andromeda combines financial planning features with portfolio optimization. It creates a portfolio proposal based on the client's personal situation and financial goals, including planned portfolio in- or outflows, and compares the envisaged asset allocation with an efficient portfolio set – the efficient frontier – based on a set of fixed capital market return forecasts. The system creates a detailed asset allocation proposal in PDF form that outlines all the aspects of the allocation being considered.

The services we can provide

Global Research has now set up a team for Alternative Investment Research & Portfolio Analytics, which, in collaboration with the Asset Management division, will actively support the use of the Andromeda financial planning and portfolio optimization tool within the Private Bank, and can offer targeted portfolio-structuring services for clients where appropriate. The Andromeda suite is currently being released to a selected test group of investment consultants, portfolio managers and senior relationship managers. Please do not hesitate to contact the author for further information. ■

Figure 1 Source: Credit Suisse

Andromeda can replay major financial crises such as 9/11 and assess their impact on a client portfolio.



"We are playing in the top league"

Both the Fuchs Report and the Elite Report published by the German newspaper "Die Welt/Welt am Sonntag" rank Credit Suisse among the best asset managers. Michael M. Rüdiger, Head of Market Area Germany, Austria & Luxembourg, tells us why Credit Suisse Germany performed so well in both tests recently. **Urs Schwarz**, Staff Publications

"The fact remains that Credit Suisse Germany has earned itself a reputation as a premium bank."

Photo: Credit Suisse

Two awards in one go. What makes Credit Suisse Germany better than the others?

Michael Rüdiger: There are a number of reasons why we are now in the top league of asset managers. In recent years, we have built up the best advisory team in Germany, and we benefit from an excellent business model. In the first place, we consistently follow the "best select" principle, which means that we do not choose only proprietary products for our clients, but always offer them the best product on the market in objective terms. Very few of our competitors follow this principle, and that makes us stand out. Second, we provide comprehensive advisory services and third, we work as integrators. The advisor, him or herself is a generalist, but knows when and which specialist should be consulted to meet the client's requirements in an optimal manner.

Both reports mention a continual improvement process at Credit Suisse Germany. Which of last year's improvements are you particularly proud of?

Michael Rüdiger: Of the improved interlinking of products, advice and asset allocation. When we introduce a new product, we immediately anchor it in the advisory process and in the comprehensive asset allocation strategy, which now also takes account of the client's holdings and real estate assets.

How important are these awards in the German market?

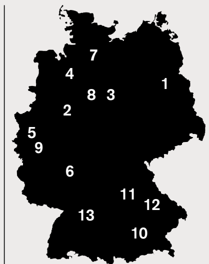
Michael Rüdiger: Clients talk about the test results. In particular, clients who are not happy with their bank use such tests as a decision-making factor for any change. And we should not underestimate the internal impact. Staff who were told three years ago that we aimed to be the quality leader in Germany can now see that we have achieved and maintained our goal, which is a great boost to motivation.

You recently wrote that it has become increasingly important to develop concepts that combine private and business elements. Why is this now more important?

Michael Rüdiger: Integrated offers are not merely a group organizational measure, but are based on the needs of our clients. Cross-divisional concepts have become more important in the light of the fact that Germany will soon see the transfer of a large number of small and medium-sized enterprises to successors. Whoever can offer these entrepreneurs one-stop solutions that cover both their business and private needs will have the edge. ■

Links

→ Summary of the Elite Report 2006-01-06_Welt- Report-d_lang.pdf
→ Excerpts from the Elite Report elitereport.pdf
→ Excerpts from the Fuchs Report fuchs-report.pdf



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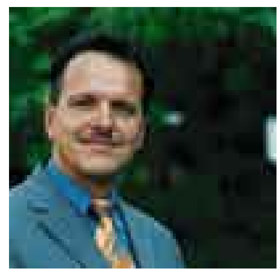

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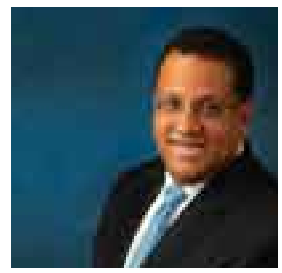

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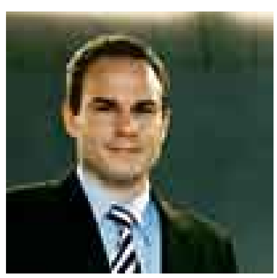

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Rating Change History 18/5/2006

Company	Rating	Data (since)
BARRY CALLEBAUT N	BUY	11/11/2005
(BARN SW)	HOLD	18/08/2005
BBVA R (BBVA SM)	BUY	08/11/2004
	HOLD	03/11/2003
BMW (BMW GR)	BUY	13/04/2004
CADBURY SCHWEPPES	HOLD	04/07/2005
(CBRY LN)		
CARREFOUR (CA FP)	SELL	15/01/2004
	HOLD	12/01/2005
	SELL	02/12/2004
	HOLD	03/09/2003
	BUY	11/06/2003
CITIGROUP (C US)	BUY	20/10/2000
COCA-COLA CO (KO US)	BUY	16/02/2005
	HOLD	14/01/2005
	SELL	16/09/2004
	HOLD	26/07/2004
	BUY	18/02/2004
DANONE (BN FP)	BUY	22/02/2006
	HOLD	20/07/2005
	BUY	26/04/2005
	HOLD	15/01/2004
DIAGEO (DGE LN)	BUY	16/02/2006
	HOLD	01/12/2004
DR ING PORSCHE VZ	HOLD	27/09/2005
(POR3 GY)	BUY	12/05/2005
	HOLD	02/07/2004
	BUY	05/03/2004
EMMI N (EMMN SW)	HOLD	23/02/2006
HOLCIM N (HOLN VX)	REST	11/05/2006
	BUY	01/03/2006
	HOLD	21/10/2004
	BUY	08/08/2003
	HOLD	08/08/2003
HSBC HLDG (HSBA LN)	BUY	24/02/2006
	HOLD	13/12/2004
	BUY	03/08/2004
	HOLD	14/01/2004
	BUY	05/08/2003

Company	Rating	Data (since)
HYUNDAI MOTOR CO	HOLD	03/05/2006
(005380 KS)	BUY	27/01/2006
	HOLD	20/12/2005
INBEV (INB BB)	BUY	28/02/2006
	HOLD	26/04/2005
	BUY	19/08/2003
ITO EN (2593 JP)	HOLD	05/04/2006
KRAFT FOODS-A	HOLD	18/02/2004
(KFT US)	BUY	03/10/2003
LAFARGE (LG FP)	BUY	21/02/2006
	HOLD	04/12/2003
	BUY	12/09/2003
LINDT & SPRÜNGLI	HOLD	01/09/2004
(LISP SW)	BUY	21/02/2003
L'ORÉAL (OR FP)	HOLD	10/03/2003
LVMH (MC FP)	BUY	08/03/2002
METRO (MEO GY)	HOLD	13/12/2005
	SELL	02/11/2005
	HOLD	12/01/2005
NESTLÉ N (NESN VX)	BUY	15/01/2004
	HOLD	16/09/2003
PEPSICO (PEP US)	BUY	04/01/2005
	HOLD	21/04/2004
PERNOD-RICARD (RI FP)	HOLD	09/02/2006
	BUY	07/02/2005
	HOLD	28/04/2004
	BUY	02/07/2003
SABMILLER (SAB LN)	HOLD	02/12/2004
	BUY	01/09/2004
TESCO PLC (TSCO LN)	HOLD	24/01/2005
	BUY	11/06/2003
THE SWATCH GRP (UHR)	BUY	24/02/2003
TOYOTA MOTOR (7203 JP)	BUY	09/02/2006
	HOLD	06/10/2005
	BUY	06/02/2004
	HOLD	09/05/2003
UNILEVER CERT (UNA NA)	HOLD	30/07/2004
	BUY	27/08/2003

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Guide to analysis

Rating allocation as of 18/05/2006

	Overall	With investment interests only
BUY	45.87%	45.64%
HOLD	46.45%	47.02%
SELL	5.95%	5.73%
RESTRICTED	1.73%	1.61%

Relative performance
At the stock level, the selection takes into account the relative attractiveness of individual shares versus the sector, market position, growth prospects, balance-sheet structure and valuation. The sector and country recommendations are "overweight," "neutral," and "underweight" and are assigned according to relative performance against the respective regional and global benchmark indices.

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The stock recommendations are BUY, HOLD and SELL and are dependent on the expected absolute performance of the individual stocks, generally on a 6–12 months horizon based on the following criteria:

BUY	10% or greater increase in absolute share price
HOLD	10%/+10% variation in absolute share price
SELL	10% or more decrease in absolute share price
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