

The new (developing) titans

SURVEY: WORLD ECONOMY

Pam Woodall

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From *The Economist* print edition

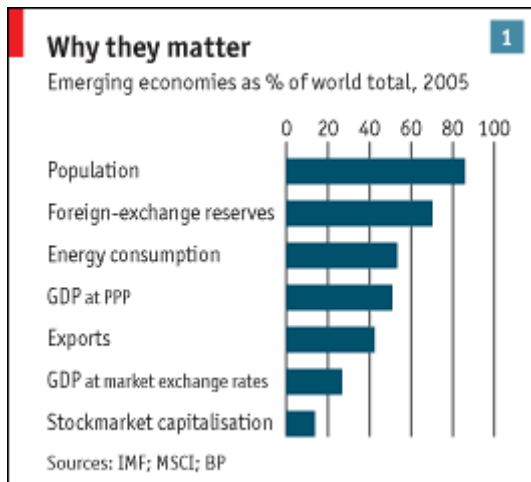
China, India and other developing countries are set to give the world economy its biggest boost in the whole of history, says Pam Woodall (interviewed below). What will that mean for today's rich countries?

LAST year the combined output of emerging economies reached an important milestone: it accounted for more than half of total world GDP (measured at purchasing-power parity). This means that the rich countries no longer dominate the global economy. The developing countries also have a far greater influence on the performance of the rich economies than is generally realised. Emerging economies are driving global growth and having a big impact on developed countries' inflation, interest rates, wages and profits. As these newcomers become more integrated into the global economy and their incomes catch up with the rich countries, they will provide the biggest boost to the world economy since the industrial revolution.

Indeed, it is likely to be the biggest stimulus in history, because the industrial revolution fully involved only one-third of the world's population. By contrast, this new revolution covers most of the globe, so the economic gains—as well as the adjustment pains—will be far bigger. As developing countries and the former Soviet block have embraced market-friendly economic reforms and opened their borders to trade and investment, more countries are industrialising and participating in the global economy than ever before. This survey will map out the many ways in which these economic newcomers are affecting the developed world. As it happens, their influence helps to explain a whole host of puzzling economic developments, such as the record share of profits in national income, sluggish growth in real wages, high oil prices alongside low inflation, low global interest rates and America's vast current-account deficit.

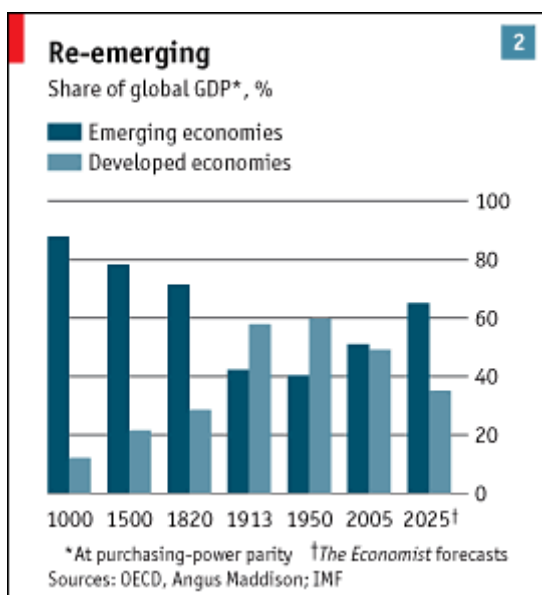
Emerging countries are looming larger in the world economy by a wide range of measures (see chart 1). Their share of world exports has jumped to 43%, from 20% in 1970. They consume over half of the world's energy and have accounted for four-fifths of the growth in oil demand in the past five years. They also hold 70% of the world's foreign-exchange reserves.

Of course there is more than one respectable way of doing the sums. So although measured at purchasing-power parity (which takes account of lower prices in poorer countries) the emerging economies now make up over half of world GDP, at market exchange rates their share is still less than 30%. But even at market exchange rates, they accounted for well over half of the increase in global output last year. And this is not just about China and India: those two together made up less than one-quarter of the total increase in emerging economies' GDP last year.



There is also more than one definition of emerging countries, depending on who does the defining (see [article](#)). Perhaps some of these countries should be called re-emerging economies, because they are regaining their former eminence. Until the late 19th century, China and India were the world's two biggest economies. Before the steam engine and the power loom gave Britain its industrial lead, today's emerging economies dominated world output. Estimates by Angus Maddison, an economic historian, suggest that in the 18 centuries up to 1820 these economies produced, on average, 80% of world GDP (see chart 2). But they were left behind by Europe's technological revolution and the first wave of globalisation. By 1950 their share had fallen to 40%.

Now they are on the rebound. In the past five years, their annual growth has averaged almost 7%, its fastest pace in recorded history and well above the 2.3% growth in rich economies. The International Monetary Fund forecasts that in the next five years emerging economies will grow at an average of 6.8% a year, whereas the developed economies will notch up only 2.7%. If both groups continued in this way, in 20 years' time emerging economies would account for two-thirds of global output (at purchasing-power parity). Extrapolation is always risky, but there seems every chance that the relative weight of the new pretenders will rise.

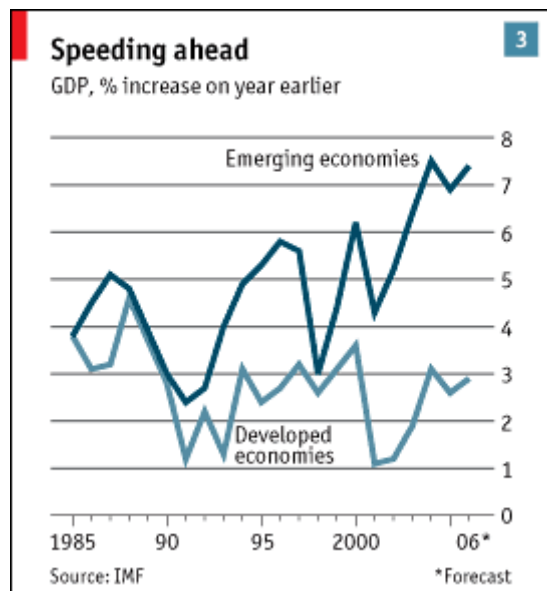


Faster growth spreading more widely across the globe makes a huge difference to global growth rates. Since 2000, world GDP per head has grown by an average of 3.2% a year, thanks to the acceleration in emerging economies. That would beat the 2.9% annual growth during the golden age of 1950-73, when Europe and Japan were rebuilding their economies after the war; and it would certainly exceed growth during the industrial revolution. That growth, too, was driven by technological change and by an explosion in trade and capital flows, but by today's standards it was a glacial affair. Between 1870 and 1913 world GDP per head increased by an average of only 1.3% a year. This means that the first decade of the 21st century could see the fastest growth in average world income in the whole of history.

Financial wobbles this summer acted as a reminder that emerging economies are more volatile than rich-country ones; yet their long-run prospects look excellent, so long as they continue to move towards free and open markets, sound fiscal and monetary policies and better education. Because they start with much less capital per worker than developed economies, they have huge scope for boosting productivity by importing Western machinery and know-how. Catching up is easier than being a leader. When America and Britain were industrialising in the 19th century, they took 50 years to double their real incomes per head; today China is achieving the same feat in nine years.

What's new

Emerging economies as a group have been growing faster than developed economies for several decades. So why are they now making so much more of a difference to the old rich world? The first reason is that the gap in growth rates between the old and the new world has widened (see chart 3). But more important, emerging economies have become more integrated into the global system of production, with trade and capital flows accelerating relative to GDP in the past ten years.



China joined the World Trade Organisation only in 2001. It is having a bigger global impact than other emerging economies because of its vast size and its unusual openness to trade and investment with the rest of the world. The sum of China's total exports and imports amounts to around 70% of its GDP, against only 25-30% in India

or America. By next year, China is likely to account for 10% of world trade, up from 4% in 2000.

What is also new is that the internet has made it possible radically to reorganise production across borders. Thanks to information technology, many once non-tradable services, such as accounting, can be provided from afar, exposing more sectors in the developed world to competition from India and elsewhere.

Faster growth that lifts the living standards of hundreds of millions of people in poor countries should be a cause for celebration. Instead, many bosses, workers and politicians in the rich world are quaking in their boots as output and jobs shift to low-wage economies in Asia or eastern Europe. Yet on balance, rich countries should gain from poorer ones getting richer. The success of the emerging economies will boost both global demand and supply.

Rising exports give developing countries more money to spend on imports from richer ones. And although their average incomes are still low, their middle classes are expanding fast, creating a vast new market. Over the next decade, almost a billion new consumers will enter the global marketplace as household incomes rise above the threshold at which people generally begin to spend on non-essential goods. Emerging economies have already become important markets for rich-world firms: over half of the combined exports of America, the euro area and Japan go to these poorer economies. The rich economies' trade with developing countries is growing twice as fast as their trade with one another.

The future boost to demand will be large. But more important in the long term will be the stimulus to the world economy from what economists call a "positive supply shock". As China, India and the former Soviet Union have embraced market capitalism, the global labour force has, in effect, doubled. The world's potential output is also being lifted by rapid productivity gains in developing countries as they try to catch up with the West.

This increased vitality in emerging economies is raising global growth, not substituting for output elsewhere. The newcomers boost real incomes in the rich world by supplying cheaper goods, such as microwave ovens and computers, by allowing multinational firms to reap bigger economies of scale, and by spurring productivity growth through increased competition. They will thus help to lift growth in world GDP just when the rich world's greying populations would otherwise cause it to slow. Developed countries will do better from being part of this fast-growing world than from trying to cling on to a bigger share of a slow-growing one.

Stronger growth in emerging economies will make developed countries as a whole better off, but not everybody will be a winner. The integration of China and other developing countries into the world trading system is causing the biggest shift in relative prices and incomes (of labour, capital, commodities, goods and assets) for at least a century, and this, in turn, is leading to a big redistribution of income. For example, whereas prices of the labour-intensive goods that China and others export are falling, prices of the goods they import, notably oil, are rising.

In particular, the new ascendancy of the emerging economies has changed the relative returns to labour and capital. Because these economies' global integration has made labour more abundant, workers in developed countries have lost some of their

bargaining power, which has put downward pressure on real wages. Workers' share of national income in those countries has fallen to its lowest level for decades, whereas the share of profits has surged. It seems that Western workers are not getting their full share of the fruits of globalisation. This is true not just for the lowest-skilled ones but increasingly also for more highly qualified ones in, say, accountancy and computer programming.

If wages continue to disappoint, there could be a backlash from workers and demands for protection from low-cost competition. But countries that try to protect jobs and wages through import barriers or restrictions on offshoring will only hasten their relative decline. The challenge for governments in advanced economies is to find ways to spread the benefits of globalisation more fairly without reducing the size of those gains.

The high share of profits and low share of wages in national income are not the only numbers that have strayed a long way from their historical average. An alarming number of economic variables are currently way out of line with what conventional economic models would predict. America's current-account deficit is at a record high, yet the dollar has remained relatively strong. Global interest rates are still historically low, despite strong growth and heavy government borrowing. Oil prices have tripled since 2002, yet global growth remains robust and inflation, though rising, is still relatively low. House prices, however, have been soaring in many countries.

Puzzling it out

This survey will argue that all of these puzzles can be explained by the growing impact of emerging economies. For instance, low bond yields and the dollar's refusal to plunge are partly due to the way these countries have been piling up foreign reserves. Likewise, higher oil prices have mostly been caused by strong demand from developing countries rather than by an interruption of supply, so they have done less harm to global growth than in the past. And their impact on inflation has been offset by falling prices of goods exported by emerging economies. This has also made it easier for central banks to achieve their inflation goals with much lower interest rates than in the past.

All this will require some radical new thinking about economic policy. Governments may need to harness the tax and benefit system to compensate some workers who lose from globalisation.

Monetary policy also needs to be revamped. Central bankers like to take the credit for the defeat of inflation, but emerging economies have given them a big helping hand, both by pushing down the prices of many goods and by restraining wages in developed countries. This has allowed central banks to hold interest rates at historically low levels. But they have misunderstood the monetary-policy implications of a positive supply shock. By keeping interest rates too low, they have allowed a build-up of excess liquidity which has flowed into the prices of assets such as homes, rather than into traditional inflation. They have encouraged too much borrowing and too little saving. In America the overall result has been to widen the current-account deficit.

The central banks' mistake has been compounded by the emerging economies' refusal to allow their exchange rates to rise, piling up foreign-exchange reserves instead.

Bizarrely, by financing America's deficit, poor countries are subsidising the world's richest consumers. The opening up of emerging economies has thus not only provided a supply of cheap labour to the world, it has also offered an increased supply of cheap capital. But this survey will argue that the developing countries will not be prepared to go on financing America's massive current-account deficit for much longer.

At some point, therefore, America's cost of capital could rise sharply. There is a risk that the American economy will face a sharp financial shock and a recession, or an extended period of sluggish growth. This will slow growth in the rest of the world economy. But America is less important as a locomotive for global growth than it used to be, thanks to the greater vigour of emerging economies. America's total imports from the rest of the world last year amounted to only 4% of world GDP. The greater risk to the world economy is that a recession and falling house prices would add to Americans' existing concerns about stagnant real wages, creating more support for protectionism. That would be bad both for the old rich countries and the new emerging stars.

But regardless of how the developed world responds to the emerging giants, their economic power will go on growing. The rich world has yet to feel the full heat from this new revolution.

A question of definition

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From *The Economist* print edition

The borderline between rich and poor has become more fluid

WHAT determines whether an economy is “developed” or “developing”? Economies used to be categorised as developed if they were members of the Organisation for Economic Co-operation and Development (OECD), the so-called “rich-man's club”. But today the OECD is something of a mixed bag. It includes poorer countries such as Mexico and Poland, yet excludes places such as Hong Kong, Singapore and the UAE, which have GDPs per person similar to Italy's.

To add to the confusion, different organisations use different definitions. For instance, JPMorgan Chase and the United Nations count Hong Kong, Singapore, South Korea and Taiwan as emerging economies. Morgan Stanley Capital International includes South Korea and Taiwan in its emerging-market index, but keeps Hong Kong and Singapore in its developed-markets index. The IMF schizophrenically counts all four as “developing” in its International Financial Statistics but as “advanced economies” in its World Economic Outlook.

This survey will use the pre-1994 OECD membership as its definition of the developed world, and lump the rest—including Mexico, Poland, Hong Kong and so on—together as emerging economies. This is because its main objective is to assess the impact of the faster-growing developing world on the old rich world. The terms developing, third and poor world will be used interchangeably to refer to emerging

economies, even though many of them are well on their way to joining the developed world.

Emerging at last

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Developing economies are having a good run

IN 1994 this newspaper launched a new emerging-market indicators page to mark “a fundamental and remarkably rapid change in the balance of the world economy”. Emerging economies were then growing twice as fast as the rich ones, and their stockmarkets were surging. But the timing of the launch was awful. It came at the start of a dismal decade for emerging economies, with crises in Mexico at the end of 1994, Asia in 1997, Russia in 1998, Brazil in 1999, Turkey in 2000, Argentina in 2001 and Venezuela in 2002. By 2002 the MSCI emerging-market share-price index had lost almost 60% of its 1994 value. Last year it regained that peak. But is the current economic boom any more sustainable?

The 25% drop in emerging stockmarkets during May and June of this year was a warning. Having tripled over the previous three years, share prices, fuelled by excessive global liquidity, had got ahead of themselves and a correction was overdue. However, the economies themselves look in better shape than for decades. Over the past five years GDP per head in the emerging economies has grown by an annual average of 5.6%, compared with only 1.9% in the developed world. In the preceding 20 years GDP per head in poor countries had been growing by an average of 2.5%, little more than in rich economies.

Deep and crisp and even

In the past, as some economies sprinted, others stumbled. Today rapid growth is more evenly spread. This year, for the third year running, all of the 32 biggest emerging economies tracked weekly by *The Economist* are showing positive growth. In every previous year since the 1970s at least one emerging economy, often several, suffered a recession, if not a severe financial crisis.

Even Africa's prospects look brighter than they have done for many years. In the last quarter of the 20th century real income per person in the world's poorest region stagnated, but so far this decade Africa has put on a spurt, with GDP growth above 5% for three consecutive years, thanks largely to higher commodity prices.

Developing countries have also benefited from America's consumer-spending binge, which has sucked in imports; and from historically low global interest rates, which have lowered debt-service costs. But favourable external factors played only a minor part in the revival of emerging economies. Much more importantly, their underlying economic health has improved. Structural reforms and sounder macroeconomic policies have made them more able to sustain robust growth and to withstand adverse shocks. Inflation has been tamed and many countries have trimmed their budget deficits; indeed, on average they are running much smaller deficits than the rich world.

Emerging economies are also much less dependent on foreign capital than they were a decade ago, leaving them less vulnerable to the whims of investors. As a group, they are in their eighth year of current-account surplus, having been in deficit for most of the previous 20. Their average ratio of foreign debt to exports has tumbled from 174% in 1998 to an estimated 75% this year. Foreign-exchange reserves have swollen to nine months' import cover, compared with only five months' just before the Asian crisis in 1997. And most emerging economies no longer fix their currencies at the grossly overvalued rates that contributed to past financial crises. If anything, the currencies of China and some other Asian countries are now undervalued.

Over the past few years all regions have enjoyed brisker growth, but some are in better shape than others. Emerging European economies have the least healthy external balances. Hungary and Turkey have current-account deficits of 7-8% of GDP. When investors dumped emerging-market assets in May and June of this year, these countries were hit hardest.

Emerging economies still face many potential risks, from banking crises to unrest in response to widening income inequality. Some could be badly hurt by a slump in demand in America or China and a consequent fall in commodity prices. Stephen Roach of Morgan Stanley argues that the weakness of emerging economies is no longer their dependence on external finance, as in the 1990s, but their dependence on external demand.

Just like America during its take-off in the late 19th century, emerging economies tend to be subject to economic ups and downs. But what matters most for their long-term prospects are their economic policies. They need to take advantage of the present period of strong growth to push ahead with reforms. Governments that still have large budget deficits, notably in central and eastern Europe, must wield the axe. Others, such as China, need to clean up their banking systems. Almost everywhere, governments can do more to free up markets and reduce their own meddling. In Asia, that includes allowing greater exchange-rate flexibility.

Rich economies can grow only by inventing new technology or management methods. Poor countries, in theory, should find it easy to grow faster because they can boost their productivity by adopting innovations from richer ones. In the past, such opportunities were all too often squandered through bad policies. But if structural reforms continue, there is huge future potential for growth.

Alwyn Young, an American economist, caused a stir in the mid-1990s (just before the East Asian crisis) by suggesting that East Asia's growth miracle was a myth. He calculated that most of the region's faster growth was due to increased inputs of labour and capital rather than to total factor productivity growth (the efficiency with which inputs of both capital and labour are used). Paul Krugman, another American economist, summed up Mr Young's discovery thus: "The miracle turns out to have been based on perspiration rather than inspiration."

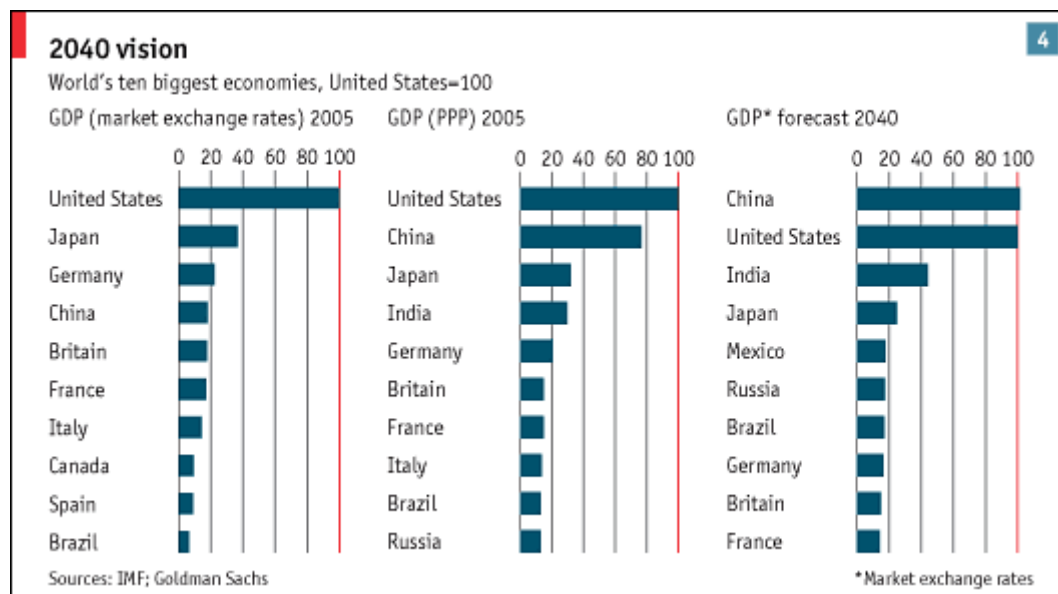
In fact, Mr Young underestimated the growth in total factor productivity in the Asian tiger countries, which had actually been considerably faster than in rich economies. Moreover, developing economies do not need inspiration to catch up. In the early stages of development, it is enough to maintain high rates of investment and copy techniques that have proved successful elsewhere. Asia worked its "miracle" by

creating the right conditions for high investment: a high saving rate, open markets and a good education system.

Today, China's critics similarly argue that its growth has been driven largely by wasteful investment and cannot be sustained. In fact, total factor productivity growth in China has been even faster than in the rest of Asia. Over the past quarter-century it has averaged 3% a year, accounting for roughly the same amount of GDP growth as capital investment. (Over the same period, America's total factor productivity grew by an annual average of only 1%.) Growth will slow as China's capital-to-output ratio rises toward rich-country levels and its excess labour dries up, but the country should still have a couple more decades of rapid growth in it.

A race that all can win

People love to argue about whether China or India will win the economic race, yet both can prosper together. China scores higher than India on many of the key ingredients of growth: it is more open to trade and investment, has a better record of macroeconomic stability and has put more effort into education and infrastructure. It is perhaps 10-15 years ahead of India in its economic reforms. However, in the long run India might pull ahead because its population will continue to grow long after China's has levelled off. Forecasters say that by 2030 it is likely to have more people than China.



Brazil, Russia, India and China are the four biggest emerging economies, grouped together under the acronym BRICs, created by Goldman Sachs in 2001. These four economies account for two-fifths of the total GDP of all emerging economies. China and India are generally seen as the two giants among them. This is true in purchasing-power-parity terms, but in current dollars Brazil and Russia both produce more than India. At market exchange rates, only China and Brazil rank among the world's top ten economies, but in purchasing-power terms all four BRICs make it.

Goldman's economists predict that if governments stick to policies that support growth, by 2040 China will be the world's biggest economy at market exchange rates. By then there will be five emerging economies in the top ten: the four BRICs plus Mexico (see chart 4). Together, they will be bigger in dollar terms than the G7 economies.

These forecasts assume, realistically, that growth in the BRICs will slow significantly by the end of the period. About one-third of the projected increase in the dollar value of the BRICs' GDPs comes from real currency appreciation rather than real growth. As countries' relative productivity rises, their exchange rates should move closer to purchasing-power parity.

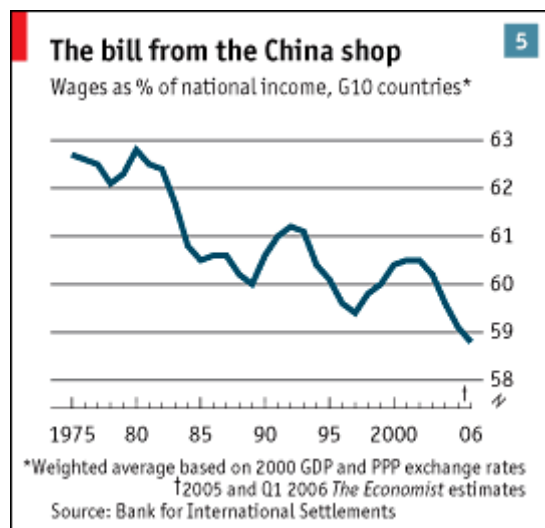
However impressive, the forecasts still leave income per head in the BRICs well below those in developed countries. In 2040 the average American will still be three to four times richer than the average Chinese. Faster growth will not automatically end third-world poverty; that depends on how the fruits of growth are shared. But faster growth will make this goal more achievable. And as they move towards it, these economies will leave an ever larger footprint on the globe.

More pain than gain

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From *The Economist* print edition

Many workers are missing out on the rewards of globalisation



RICH countries have democratic governments, so continued support for globalisation will depend on how prosperous the average worker feels. Yet workers' share of the cake in rich countries is now the smallest it has been for at least three decades (see chart 5). In many countries average real wages are flat or even falling.

Meanwhile, capitalists have rarely had it so good. In America, Japan and the euro area, profits as a share of GDP are at or near all-time highs (see chart 6). Corporate America has increased its share of national income from 7% in mid-2001 to 13% this year.

Like so many other current economic puzzles, the redistribution of income from labour to capital can be largely explained by the entry of China, India and other emerging economies into world markets. Globalisation has lifted profits relative to wages in several ways. First, offshoring to low-wage countries has reduced firms' costs. Second, employers' ability to shift production, whether or not they take advantage of it, has curbed the bargaining power of workers in rich countries. In

Germany, for example, several big firms have negotiated pay cuts with their workers to avoid moving production to central Europe. And third, increased immigration has depressed wages in sectors such as catering, farming and construction.

Most of the fears about emerging economies focus on jobs being lost to low-cost foreign competitors. But the real threat is to wages, not jobs. In the long run, trade and offshoring should have little effect on total employment in rich countries; rather, they will change its composition. So long as labour markets are flexible, job losses in manufacturing should eventually be offset by new jobs elsewhere. But trade with emerging economies can have a big impact on both average and relative wages.

Over long periods of time, real wages tend to track average productivity growth. But so far this decade, workers' real pay in many developed economies has increased more slowly than labour productivity. The real weekly wage of a typical American worker in the middle of the income distribution has fallen by 4% since the start of the recovery in 2001. Over the same period labour productivity has risen by 15%. Even after allowing for health and pension benefits, total compensation has risen by only 1.5% in real terms. Real wages in Germany and Japan have also been flat or falling. Thus the usual argument in favour of globalisation—that it will make most workers better off, with only a few low-skilled ones losing out—has not so far been borne out by the facts. Most workers are being squeezed.



If GDP per person is growing fairly briskly, why are most workers missing out on real pay rises? Partly because a bigger share is going to profits, and partly because high earners have pocketed a huge slice of the gains in income, causing inequality to widen. America's top 1% of earners now receive 16% of all income, up from 8% in 1980. Wage inequality in Europe and Japan has also increased, but not by as much.

A decade ago, the consensus among economists was that increasing wage inequality was caused mainly not by trade but by information technology, which has raised the demand for skilled workers relative to unskilled ones. Today, a growing number of economists agree that trade is playing a bigger role. It is hard to separate the impact of globalisation and IT on relative wages because they both reduce the demand for low-skilled workers. But now that the majority of workers are losing out, the finger of blame points at globalisation.

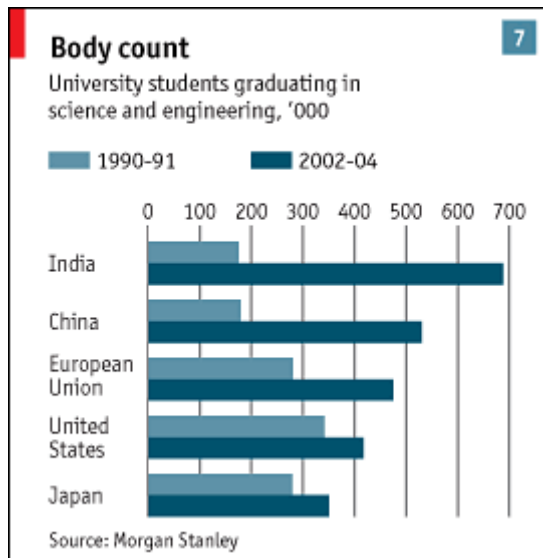
It's all comparative

Traditional trade theory, based on the ideas of David Ricardo, a 19th-century economist, argues that economies gain from trade by specialising in products where they have a comparative advantage. Developed economies have lots of skilled workers, whereas emerging economies have lots of low-skilled ones, so according to the theory advanced countries will specialise in capital-intensive products requiring skilled labour and emerging economies in low-tech products. Competition from cheaper imports will reduce the wages of unskilled workers in developed economies, but workers as a whole will be better off.

Yet, according to the evidence above, the average worker does not seem to be enjoying his fair share of the fruits of economic prosperity. Richard Freeman, an economist at Harvard University, points to several reasons why the traditional theory may need modifying. The first is that the sheer size of the emerging giants' labour forces has shifted the global capital-labour ratio (which determines the relative rewards of capital and workers) massively against workers as a group. The entry of China, India and the former Soviet Union into market capitalism has, in effect, doubled the world supply of workers, from 1.5 billion to 3 billion. These new entrants brought little capital with them, so the global capital-labour ratio dropped sharply. According to economic theory, this should reduce the relative price of labour and raise the global return to capital—which is exactly what has happened.

Over time, competition should reduce profit margins and distribute benefits back to consumers and workers in the form of lower prices. But downward pressure on wages in rich countries could continue for a long time. China still has perhaps 200m underemployed rural workers who could move to factories over the next two decades, so wages for low-skilled workers are rising more slowly than productivity, reducing China's unit labour costs.

A second reason why the traditional trade model needs modifying has to do with a rise in emerging countries' skill levels. It used to be thought that only rich countries had educated workforces able to produce skill-intensive goods, but poor countries have invested heavily in education in recent years, allowing them to start competing in more sophisticated markets. Every year, 1.2m engineers and scientists graduate from Chinese and Indian universities, as many as in America, the European Union and Japan combined and three times the number ten years ago (see chart 7). In 1970 America accounted for 30% of all university enrolments worldwide; now its share is down to around 12%.



The McKinsey Global Institute estimates that only one-tenth of engineering graduates in China and one-quarter in India would meet the standards expected by big American firms. But this will improve over time. A report by the World Bank also points out that a large share of engineering graduates in China and India become civil and electrical engineers, needed for the boom in domestic construction. There are not enough engineers and scientists to produce high-tech goods across the board. But it remains true that there has been a big increase in the global supply of educated as well as unskilled workers.

A third flaw in the traditional trade model, says Mr Freeman, is its assumption that rich countries would make high-tech products and developing economies low-tech ones. In fact, rich countries no longer have a monopoly on high-tech capital and know-how. The OECD says that in 2004 China overtook America as the world's leading exporter of information-technology goods. This exaggerates China's move up the ladder: laptop computers, mobile phones and DVD players are no longer cutting-edge technology, and they are typically only assembled in China by foreign firms, with most of their high-value components being imported. Even so, the faster spread of technology to poor countries is weakening the rich world's comparative advantage in high-tech sectors. As emerging economies start to export high-tech goods and services, this reduces the prices of such products in world markets, and hence the wages of skilled workers in the developed world.

White-collar blues

It is no longer just dirty blue-collar jobs in manufacturing that are being sucked offshore but also white-collar service jobs, which used to be considered safe from foreign competition. Telecoms charges have tumbled, allowing workers in far-flung locations to be connected cheaply to customers in the developed world. This has made it possible to offshore services that were once non-tradable. Morgan Stanley's Mr Roach has been drawing attention to the fact that the "global labour arbitrage" is moving rapidly to the better kinds of jobs. It is no longer just basic data processing and call centres that are being outsourced to low-wage countries, but also software programming, medical diagnostics, engineering design, law, accounting, finance and business consulting. These can now be delivered electronically from anywhere in the world, exposing skilled white-collar workers to greater competition.

The standard retort to such arguments is that outsourcing abroad is too small to matter much. So far fewer than 1m American service-sector jobs have been lost to offshoring. Forrester Research forecasts that by 2015 a total of 3.4m jobs in services will have moved abroad, but that is tiny compared with the 30m jobs destroyed and created in America every year. The trouble is that such studies allow only for the sorts of jobs that are already being offshored, when in reality the proportion of jobs that can be moved will rise as IT advances and education improves in emerging economies.

Alan Blinder, an economist at Princeton University, believes that most economists are underestimating the disruptive effects of offshoring, and that in future two to three times as many service jobs will be susceptible to offshoring as in manufacturing. This would imply that at least 30% of all jobs might be at risk. In practice the number of jobs offshored to China or India is likely to remain fairly modest. Even so, the mere threat that they could be shifted will depress wages.

Moreover, says Mr Blinder, education offers no protection. Highly skilled accountants, radiologists or computer programmers now have to compete with electronically delivered competition from abroad, whereas humble taxi drivers, janitors and crane operators remain safe from offshoring. This may help to explain why the real median wage of American graduates has fallen by 6% since 2000, a bigger decline than in average wages.

In the 1980s and early 1990s, the pay gap between low-paid, low-skilled workers and high-paid, high-skilled workers widened significantly. But since then, according to a study by David Autor, Lawrence Katz and Melissa Kearney, in America, Britain and Germany workers at the bottom as well as at the top have done better than those in the middle-income group. Office cleaning cannot be done by workers in India. It is the easily standardised skilled jobs in the middle, such as accounting, that are now being squeezed hardest. A study by Bradford Jensen and Lori Kletzer, at the Institute for International Economics in Washington, DC, confirms that workers in tradable services that are exposed to foreign competition tend to be more skilled than workers in non-tradable services and tradable manufacturing industries.

Ride on, Ricardo

None of this makes a case for protectionism. Offshoring, like trade, is beneficial to developed economies as a whole. The increased mobility of capital and technology does not invalidate the theory of comparative advantage, as some commentators like to argue. China and India cannot have a comparative advantage in everything; they will export some things and import others. Emerging economies' comparative advantage will largely remain in labour-intensive industries. A country's trading pattern is determined by its relative capital intensity compared with other economies. Emerging economies still have relatively little capital, so they are unlikely to become significant capital-intensive exporters until their capital-to-labour ratio catches up. That will take time. Developed economies will retain their comparative advantage in knowledge-intensive activities because they have relatively more skilled labour, but that advantage will be eroded more quickly in future.

The developed economies as a whole will still benefit hugely from trade with emerging economies. Increased competition and greater economies of scale will boost the growth in productivity and output. Consumers will enjoy lower prices and a greater variety of products, and shareholders will enjoy higher returns on capital.

Although workers will continue to see their pay squeezed, they can still gain as consumers or as shareholders, either directly or through their pensions. The snag is that richer people own more shares, so the increased return on capital tends to reinforce income inequality.

In recent years the stagnation of real wages in America has been masked by surging house prices, which make families feel better off. If the housing market stumbles and the growth in pay remains feeble, there will be increased calls for the introduction of import barriers, restrictions on overseas investment and higher taxes on profits. But in a globalised economy, such measures would be worse than useless. Firms would simply move their head offices to friendlier countries.

The fact that many workers seem to be excluded from the spoils of globalisation is a big challenge to orthodox economics. Many of its practitioners refuse to come clean about the costs to workers of trade with emerging economies for fear of handing ammunition to protectionists. At the same time, protectionists exaggerate those costs and ignore the benefits. It is time for a more honest debate about trade.

Heading off the political backlash

A study by the Institute for International Economics estimates that globalisation is benefiting America's economy by \$1 trillion a year, equivalent to \$9,000 a year for every family. But in practice the average family has not seen such a gain because much of it has gone to those at the top or into profits. This explains the lack of support for globalisation from ordinary people. Unless a solution is found to sluggish real wages and rising inequality, there is a serious risk of a protectionist backlash. Rather than block change, governments need to ease the pain it inflicts in various ways: with a temporary social safety-net for those who lose their jobs; better education to equip workers for tomorrow's jobs; and more flexible labour markets to encourage the creation of new jobs.

More controversially, governments may need to redistribute the benefits of globalisation more fairly through the tax and benefits system. Studies suggest that countries with more generous social welfare policies are less likely to support protectionism. For instance, one reason why opposition to offshoring in Europe is less vocal than in America is that European health-care systems tend to be independent of employment, whereas in America losing your job means losing your health insurance too. In a riskier labour market, there may be a stronger case for health care to be financed by the state rather than by firms. Tax redistribution does not mean a return to taxing high earners at 70-80%, which would blunt economic incentives. Instead, scrapping tax breaks such as those given to home-buyers could make the tax system more progressive.

It is often argued that generous social-insurance and redistribution policies are inconsistent with globalisation because in an open world governments cannot raise taxes and spending in isolation. But if real wages continue to stagnate and no compensation is forthcoming, political support for globalisation may fade and the vast gains from the biggest economic stimulus in world history will be lost.

More of everything

Sep 14th 2006

From *The Economist* print edition

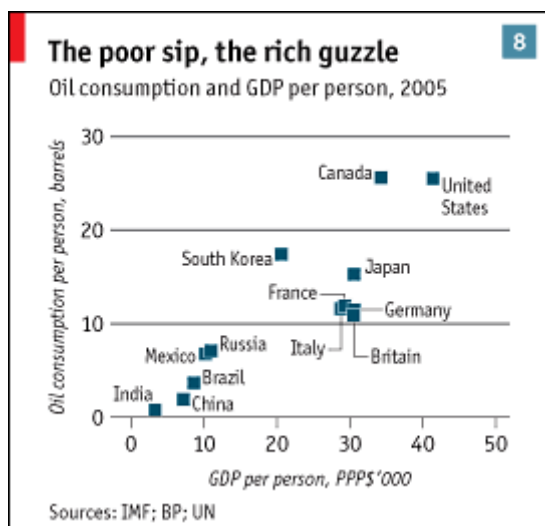
Does the world have enough resources to meet the growing needs of the emerging economies?

THE average income of the 5.5 billion people on this planet who live in emerging economies has been growing at a cracking pace: an annual rate of over 5% in recent years. As people grow richer, they want more cars and household appliances as well as better homes and roads. This, in turn, means a huge increase in the demand for energy and raw materials.

Emerging economies already account for over half of the world's total energy consumption. Since 2000 they have been responsible for 85% of the increase in world energy demand. China alone accounted for one-third of the increase in world oil consumption. The developing world's demand for industrial raw materials is also rising rapidly. China's share of world metal consumption has jumped from less than 10% to around 25% over the past decade. In the three years to 2005 the country accounted for 50% of the increase in world consumption of copper and aluminium, almost all the growth in nickel and tin and more than the entire rise in demand for zinc and lead (which means the rest of the world consumed less of them).

Some of the extra demand in China reflects a shift in production from other parts of the globe, but most of it is a net boost to global demand. Since 2000 world energy consumption has been increasing at an annual average of 2.6%, twice as fast as in the previous decade. Yet China and other emerging economies have only just begun to make an impact on commodity markets. Given the size of their populations, their use of raw materials is still modest. For instance, China uses only one-third as much copper per person as does America. Its oil consumption per person is only one-thirteenth that of America (see chart 8).

China's current demand for raw materials per person is roughly at the stage of Japan's and South Korea's during their respective economic take-off. If China follows a similar path to South Korea's as its income rises, then its total oil consumption could increase tenfold in absolute terms over the next three decades, and yet it would still be using 30% less oil per person than the United States does today.



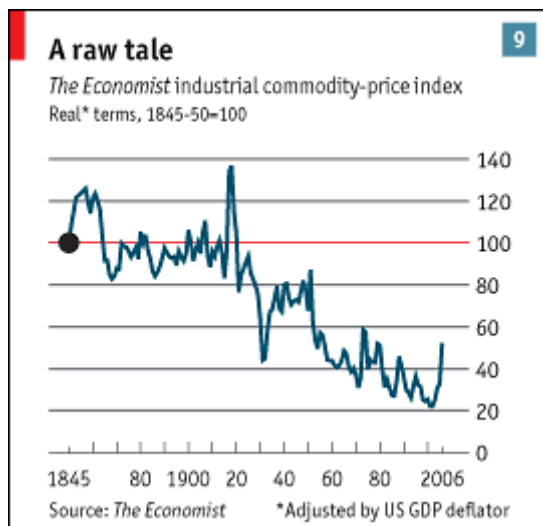
Currently about 90% of China's energy is produced at home, but in future the country will need to import much more of it. A study by Deutsche Bank predicts that its oil imports will jump from 91m tonnes to 1,860m tonnes by 2020. The bank also reckons that copper imports will rise from 3m tonnes to 20m tonnes. No wonder China is forging close trade links with commodity producers in Africa, the Middle East, Australia and Latin America.

Rising demand in emerging economies has caused oil and commodity prices to surge in recent years. The prices of both oil and metals have roughly tripled since 2002. This has been good for commodity producers, most of which are developing economies. The past few years have seen the sharpest rise in commodity prices in modern history, with metal prices in real terms gaining twice as much as in the booms of the 1970s and 1980s.

Previous commodity booms have always been followed by slumps. Indeed, the long-term trend in commodity prices has been firmly downwards. Even with the recent rise, prices in real terms are less than half of what they were in the mid-19th century (see chart 9). The shift in developed countries' output from metal-bashing industries to services has curbed demand, as have technological advances that have provided substitutes, such as fibre optics instead of copper wire. Better technology has also improved rates of mineral extraction, increasing supply.

Different this time?

However, some analysts claim that the world is now in the middle of a “super-cycle”, fuelled by soaring demand in emerging economies, which will keep prices high for the foreseeable future. Demand from emerging economies continues to grow strongly and supply remains tight, so the equilibrium price of raw materials does appear to have increased. But other experts argue that this is a speculative bubble and prices are unsustainable. According to Simon Hayley, an economist at Capital Economics, many analysts make the mistake of extrapolating from the recent rate of growth in demand and underestimating the potential for increasing supply.



Farm output can be increased most quickly; stepping up oil production takes the longest. Higher oil prices will encourage more investment and production, but it can take up to seven years for new projects to come on stream. Meanwhile, higher prices help to curb demand by encouraging a switch to alternative fuels and changes in consumer behaviour, such as buying more fuel-efficient cars. Capital Economics expects the oil price to fall to \$50 a barrel by the end of 2007 from its current level of \$70, but other analysts expect it to stay above \$60 for several years. And strong demand with little or no spare capacity means a high risk of price spikes if supply is disrupted.

Prices of commodities other than oil are more likely to fall because supply and demand are more responsive to price. Reserves of metals are vast. According to Mr Hayley, total deposits of copper (inferred from geological evidence) would last 107 years and of iron ore 151 years at current rates of consumption. These deposits may not all be profitable to extract with current technology, but high prices will encourage technological advances. A study by Martin Sommer, an economist at the IMF, finds that copper prices are currently almost three times above the cost of the least efficient producers, a much higher ratio than at the peak of the 1980s boom.

The problem is that years of low prices have caused underinvestment, and producers have been caught out by the jump in demand. But in the long term capacity should catch up and prices will fall. Global spending on exploration for non-ferrous metals rose to \$5 billion in 2005, from \$1.9 billion in 2002. High prices are also encouraging users to look for alternatives.

Commodity bulls argue that China has reached the most commodity-intensive stage of its development: industrialisation, urbanisation and infrastructure all use lots of raw materials. If China's growth remained as commodity- and energy-intensive as at present, supply would struggle to catch up and there could indeed be further upward pressure on prices. However, the country's investment boom cannot continue at its current pace. The government aims to shift the balance of growth from exports and investment towards private consumption, which implies slower growth in the demand for raw materials. The Chinese leadership has also announced a target of a 20% cut in energy use per unit of GDP by 2010.

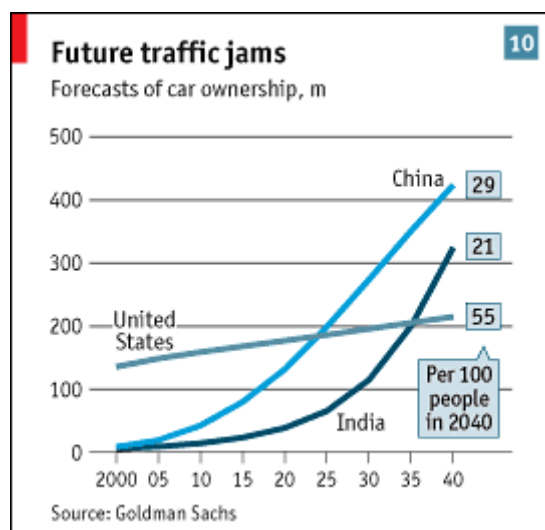
The risk is that new supplies of commodities will come on stream just as global demand starts to slow, causing prices to drop sharply. The commodity boom may

anyway have been exaggerated by speculation as new investors piled into the market. However, an analysis by the IMF suggests that speculative investment has had much less effect on metal prices than it has on oil prices.

Mr Sommer's study, using a model that estimates both future demand and future supply, forecasts that by 2010 prices of copper and aluminium in real terms will fall by 53% and 29% respectively as supply increases. This is broadly in line with prices in the futures market, which signal a 44% average fall in metal prices in real terms over the next five years, whereas oil futures are close to the current spot price.

Such a drop would still leave metal prices well above their level at the start of this decade, in contrast to previous booms after which price rises were always fully reversed. This is because global demand is likely to continue to grow much faster than it has done in the past. Even if the growth in China's demand for commodities slows in future, it will remain faster than in rich economies. Because of the country's increasing weight in the world economy, this will keep up global demand.

Moreover, as China's demand for raw materials slows, India's is likely to take off. India currently consumes only one-eighth as much copper and one-third as much energy per person as does China. India's export growth has been led by business and IT services, which use fewer raw materials. But India needs to expand its manufacturing to create more jobs, and to improve its dreadful infrastructure. UBS reckons that India's raw-material demand will triple over the next ten years as capital expenditure and infrastructure spending increase.



A study by Ting Gao, Cameron Odgers and Jiming Ha, at China International Capital Corporation, forecasts that annual growth in China's demand for copper will slow from an average of 14% over the past 15 years to 9% between 2006 and 2020, whereas India's will accelerate from 7% to 20% over the same period. Even if demand in the rest of the world continued to grow at the same pace as before, this would lift the annual rate of growth in global demand for copper from 3.5% between 1990 and 2005 to 5.3% over the next 15 years. For other commodities, too, the growth in global demand is forecast to speed up, even as growth in China slows down. The authors conclude that commodity prices will remain historically high.

Over the next few decades, one of the main determinants of increased oil demand will be higher car ownership in emerging economies. At present there are only two cars for

every 100 people in China, against 50 in America. Goldman Sachs forecasts that China's car ownership will rise to 29 per 100 by 2040. The total number of cars in China and India combined could rise from around 30m today to 750m by 2040 (see chart 10)—more than all the cars on the world's roads today. Even so, car-ownership rates in those two countries would still be only half those in America today.

Keep it green

Many people worry more about the environmental damage resulting from emerging countries' rising energy demand than they do about rising prices. Rapid industrialisation has already caused an alarming increase in emissions of greenhouse gases and air pollution. China has 16 of the world's 20 most air-polluted cities. America is still the world's largest spewer of carbon emissions, but China is expected to overtake it within a decade or so. A report by Zmarak Shalizi, an economist at the World Bank, forecasts that on current policies carbon emissions in China and India will more than double by 2020—though that would still leave China's carbon emissions per person at only one-third of the current level in America.

The world does not have the resources for another 5 billion or so people to behave the way that Americans do today. It may not be about to run out of energy and commodities, but higher prices will certainly force big changes in lifestyles. The era of cheap raw materials is over.

Weapons of mass disinflation

Sep 14th 2006

From *The Economist* print edition

Competition from emerging economies has helped to hold inflation down



INFLATION worldwide has been unusually subdued in recent years. Although in developed economies, notably America, it has been creeping up over the past year, it is still well below what most economic models would have predicted given strong growth, rising oil prices and easy monetary conditions. This is partly the result of better monetary policy, which has lowered inflationary expectations. But possibly a

more important explanation is that globalisation has made central banks' job of holding down inflation much easier.

Monetary pedants will argue that in the long run inflation is determined by monetary policy. Globalisation can affect only relative prices. Thus China is pushing up commodity prices, but pulling down the cost of labour-intensive manufactured goods (see chart 11). If central bankers aim for a particular inflation target, then falling prices of consumer durables will be offset by rising prices elsewhere, leaving the inflation rate unchanged.

However, globalisation can make such targets easier to achieve, at lower interest rates than would otherwise be necessary. This can happen in several ways. Most obviously, the opening up of China, India and the former Soviet block has exerted downward pressure on inflation by increasing competition from these lower-cost producers. The average price of American imports from emerging Asia has fallen by over 25% since the mid-1990s.

The increase in the global labour force has also curbed workers' bargaining power, and hence wage costs. More generally, the expansion in global supply brought about by the emerging economies has reduced price pressures at any given rate of growth and so reduced the cost of fighting inflation. And by helping to tame inflation, globalisation may also have bolstered the credibility of central banks, thus reducing inflationary expectations. Last but not least, globalisation has reduced the sensitivity of inflation to changes in the amount of domestic economic slack.

A study by Claudio Borio and Andrew Filardo, two economists at the Bank for International Settlements, confirms that inflation rates in developed economies have become less sensitive to the domestic output gap (the difference between actual and potential GDP), whereas global economic conditions have become more important. In a closed economy, when production outpaces potential output, inflation rises. In an open economy, an increase in demand can be met by imports, so it has less of an effect on inflation.

This makes a nonsense of traditional closed-economy models used to forecast inflation, which assume that firms set prices by adding a mark-up over unit costs, with the size of the margin depending on the amount of slack in the domestic economy. It also explains why inflation is still relatively low even though domestic capacity utilisation has been rising rapidly and unemployment has been falling in most developed economies: at a global level there is still ample economic slack.

Inflated claims?

Some economists question the link between globalisation and lower inflation. For example, a study in the IMF's April 2006 *World Economic Outlook* concludes that the decline in real import prices caused by globalisation has had little lasting effect on inflation rates. But this ignores the potentially larger indirect effects of increased international competition. Cheaper goods from China do not just reduce the prices of imports, but the prices of all goods sold in competing domestic markets. And competition from emerging economies holds down inflation not just in traded goods but also in non-traded ones, by restraining wages.

Don Kohn, vice-chairman of America's Federal Reserve, has also argued that the entry of China and India into the global trading system has probably had only a mild disinflationary effect. By running current-account surpluses, these economies are currently adding more to global supply than to demand, so their net effect on the rest of the world is disinflationary. But Mr Kohn points out that if their exchange rates rise and domestic demand increases, eliminating current-account surpluses, these effects could be reversed.

Still, even if emerging economies as a group were to run a current-account deficit, the increasing integration into the world economy of lower-cost producers would still continue to hold down wages and prices in a growing number of industries. So long as goods remain much cheaper in emerging economies, the rising market share of these countries will help to reduce inflation in the developed world. International trade in services is also likely to accelerate. The IMF calculates that if trade integration in business services were to reach the current levels in manufacturing, prices for these services would fall by 20% relative to average producer prices.

None of this means that globalisation has killed off inflation. Indeed, the rise in America's inflation rate over the past year, to over 4%, should have rung alarm bells much sooner. Central banks need to remain vigilant. Mr Kohn is right to point out that capacity constraints and hence inflationary pressures will eventually make themselves felt in the world economy, just as they always have done at national level.

Some commentators think that this is now beginning to happen. In recent months there has been a flurry of reports suggesting that China is running out of cheap labour, and that wages and export prices are rising. China, it is argued, is now exporting inflation, not deflation. Such concerns are hugely overblown. It is true that several cities have increased their minimum wage by an average of 20% this year, but many manufacturers were already paying above the minimum.

There have also been reports of labour shortages in China, but mainly for managers and skilled workers. The rapid pace of average wage growth is due to productivity gains rather than labour shortages. Average urban wages have been rising by more than 10% a year over the past decade, but productivity in manufacturing has been growing faster still, so unit labour costs have fallen. According to the *Bank Credit Analyst* they have continued to slide this year (see chart 12). China's productivity gains partly reflect a shift in the mix of its exports towards higher-value goods. In these new sectors the country is now driving global prices down, but the shift to more expensive products misleadingly makes it look as if export prices have stopped falling.

Arthur Kroeber of Dragonomics, a Beijing-based economic-research firm, dismisses the worries about China exporting inflation. Chinese export prices did pick up in 2004-05, but they are now falling again. American import prices from Asia are also still falling. Moreover, he says, it is hard to see how China can be exporting inflation when it has overcapacity, thanks to excessive investment.



In any case, focusing on China's export prices alone tells only part of the story. As China increasingly penetrates world markets and provides competition for more workers in the developed world, the downward pressure on their wages will persist. It could take two more decades before China's surplus rural labour is fully absorbed by industry.

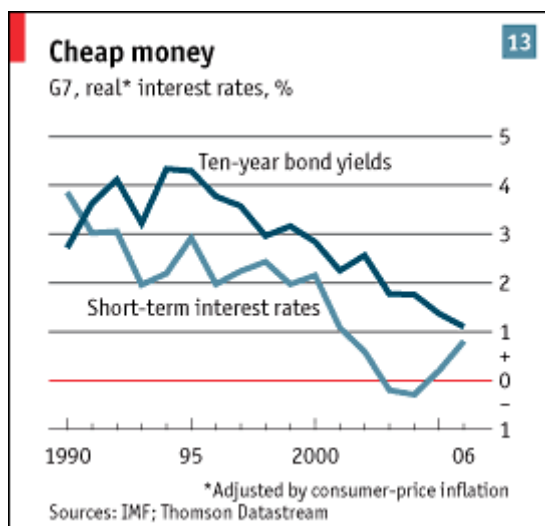
In a way, the debate about whether globalisation has reduced inflation misses the point. The real question is whether the opening up of the emerging economies has allowed central banks in rich countries to hold interest rates much lower while still meeting their inflation goals. This survey argues that it has, raising two questions. First, have low interest rates had undesirable side-effects? And second, what will happen when the cost of borrowing eventually returns to normal levels?

Unnatural causes of debt

Sep 14th 2006

From *The Economist* print edition

Interest rates are too low. Whose fault is that?



GLOBALISATION may have helped to hold down inflation, but it has also raised some new dilemmas for central banks. Most notably, should they cut interest rates to stop inflation falling below their usual target in response to a boost to global supply—which is how they would deal with falling inflation caused by a slump in demand—or should they accept a lower rate of inflation? Most central banks aim for an inflation rate of close to 2%, in the belief that too little inflation can be as harmful as too much of it.

Real interest rates in the past few years have remained lower for longer than at any other time during the past half-century. Despite recent tightening by central banks, average real short-term rates and bond yields in the developed economies are still well below normal levels (see chart 13). Most commentators have concluded that a new era of cheaper money has arrived.

Yet globalisation might have been expected to raise, not lower, the world's natural rate of interest (ie, the rate that is consistent with long-run price stability and also ensures that saving equals investment). In theory, the long-term real equilibrium interest rate should be equal to the marginal return on capital. And the opening up of emerging economies has increased the ratio of global labour to capital, raising the return on capital, so real interest rates should rise, not fall.

Another way to look at this is that real interest rates should be roughly the same as the trend rate of GDP growth (a proxy for the return on capital). If greater global economic and financial integration leads to a more efficient use of labour and capital, economic growth will be faster, which again means that real interest rates should rise. So why have they been so low?

Analysts have put forward two main explanations for the low level of real bond yields in recent years. The first is that high saving (in relation to investment) by Asian economies and Middle East oil exporters has caused a global saving glut, pushing down yields. These economies are running large current-account surpluses, and much of that money has been piled up in official reserves, particularly in American Treasury securities, as central banks have intervened in the foreign-exchange market to prevent their currencies from rising.

Of gluts and floods

Various estimates suggest that such foreign-exchange intervention reduced American yields by less than one percentage point in 2004-05. But Nouriel Roubini and Brad Setser of Roubini Global Economics reckon that the impact could be larger. Most studies ignore the fact that without official intervention by foreign central banks the dollar would be lower and hence American inflation higher, which would push bond yields higher. And if central banks were not buying dollars to prop up the currency, many private investors might hold fewer greenbacks, which again would push up yields. Adding up these and other factors, Messrs Roubini and Setser reckon that American Treasury bond yields would have been two percentage points higher in recent years if central banks in emerging economies had not bought dollar reserve assets.

A second explanation for low bond yields is that excess liquidity has pushed up the prices of all assets, including bonds. Over the past few years, the global money supply has grown at its fastest pace since the 1980s. This excess liquidity has not pushed up conventional inflation (thanks largely to cheap Chinese goods), but has fed into a series of asset-price bubbles around the world.

Both developed and emerging economies have contributed to this flood of liquidity. Central banks in rich countries have held interest rates abnormally low to offset disinflationary pressures from emerging economies. At the same time, to prevent their currencies rising, emerging economies have also held interest rates low and engaged in heavy foreign-exchange intervention, which has inflated their money supplies.

Both of these explanations for low interest rates—the saving glut and the excess liquidity—involve emerging economies; either through their impact on developed economies' inflation and hence monetary policy, or through their foreign-exchange intervention. In that sense, global monetary conditions are increasingly being influenced by policies in Beijing as much as in Washington, DC. Over the past year, emerging economies have accounted for four-fifths of the growth in the world's monetary base.

Have central banks in developed economies been right to pursue lax monetary policies? For borrowers, low interest rates are an unmitigated blessing, but for economies as a whole the gap between interest rates and the long-run return on capital has created some serious economic and financial imbalances. Thanks to cheap money, American households are saving too little and borrowing and spending too much. At the same time bubbly house prices have soared to record levels in relation to incomes.

Bill White, chief economist at the Bank for International Settlements, suggests that central banks' inflation targets may be too high, given the big boost to global capacity from China's and India's re-emergence. If a negative supply shock (from higher oil prices, say) were to cause inflation to rise, most central banks would do nothing about it as long as it did not increase inflationary expectations and lead to second-round effects on other prices. The logic is that central banks should ignore price changes that they cannot control. To be consistent, says Mr White, central banks should also have tolerated the inflation-lowering impact of a positive supply shock from the emerging economies, allowing cheaper goods and wages to reduce inflation. Instead, in 2001-03 central banks prevented inflation from falling by pushing interest rates much lower than they would otherwise have been.

Ben Bernanke, the chairman of America's Federal Reserve, would argue that when the Fed slashed interest rates to 1% in 2003, it was trying to prevent harmful deflation. However, deflation need not be what it was in the 1930s, a vicious circle of deficient demand, falling prices and rising real debt. Historically, most deflations have been benign, caused by technological innovation or the opening up of economies (ie, positive supply shocks), and were accompanied by robust growth. During the rapid globalisation of the late 19th century, flat or falling average prices went hand in hand with strong growth in output. Today's world has much more in common with that period than with the 1930s.

Too much, too soon

With hindsight, the deflation that the Fed was fretting about in 2003 was largely benign, caused by cheaper goods from China and by the IT revolution. But the Fed was so determined to prevent deflation of any kind that it cut interest rates to unusually low levels. This, argues Mr White, could have long-term costs because persistently cheap money encouraged too much borrowing, too little saving and unsustainable asset prices. The risk is that if central banks lean against benign deflation, they will unwittingly accommodate a build-up of imbalances. Ironically, these could cause a bout of bad deflation as they unwind.

The problem is that most central banks base their policy analysis on Keynesian-style economic models in which deviations from their inflation goal are assumed to reflect excess or inadequate demand, requiring a change in monetary policy. But supply shocks such as globalisation can cause deviations in inflation that require a completely different policy response. A more relevant model might be one based on the Austrian school of economics, developed in the late 19th century, when economic conditions were more akin to today's. In Austrian models the main result of excessively low interest rates is not inflation but overborrowing, an imbalance between saving and investment and a consequent misallocation of resources. That sounds like America today.

Mr White argues that if central banks focus solely on price stability, they might allow ever bigger financial imbalances to build up. This is why they need to watch a wider range of indicators beyond inflation, including the growth in credit, money, saving rates and asset prices. They should be prepared to raise interest rates in response to clear evidence of financial imbalance, says Mr White, even if it means they undershoot their inflation targets.

The other risk of holding interest rates too low for too long is that inflation will suddenly rise. This is what has now happened in America, where the inflation rate has risen above 4%, prompting the Fed to push interest rates higher this year. If the low bond yields were also largely due to excess liquidity, then rising short-term rates could push yields much higher than the markets expect. At some point rates will rise to their higher equilibrium level. The likely consequence is a severe weakening or a slump in housing markets around the globe and a sharp slowdown in consumer spending.

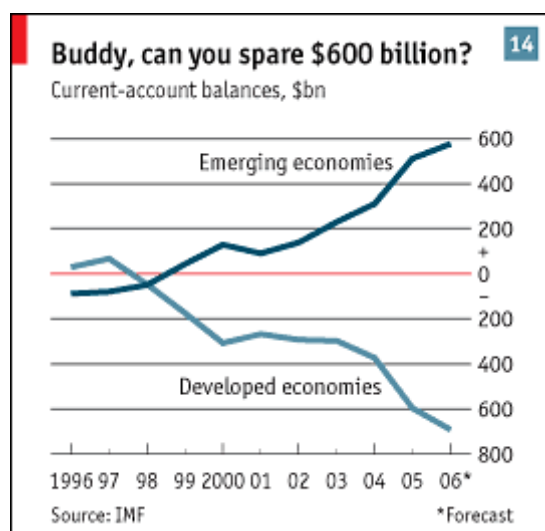
Central banks have been slow to grasp the fact that the rapid integration of emerging economies into the global market system requires them to rethink their monetary policy. If they fail to recognise benign deflation created by positive supply shocks, then excessively loose monetary policy will fuel not only financial bubbles but also bigger current-account imbalances—the subject of the next article.

A topsy-turvy world

Sep 14th 2006

From *The Economist* print edition

How long will emerging economies continue to finance America's spendthrift habits?



MANY economists have long been expecting America's widening current-account deficit to cause a financial meltdown in the dollar and the bond market. The main reason why this has not happened (yet) is that emerging economies have been happy to finance that deficit. In 2005 this group of countries ran a combined current-account surplus of over \$500 billion (see chart 14). A large chunk of that was invested in American Treasury securities, in what Ken Rogoff of Harvard University has called “the biggest foreign-aid programme in world history”.

The flow of capital from poor countries to the richest economy in the world is exactly the opposite of what economic theory would predict. According to the textbooks, capital should flow from rich countries with abundant capital, such as America, to poorer ones, such as China, where capital is relatively scarce, so returns are higher. This is what happened during the globalisation of the late 19th century, when surplus European saving financed the development of America. Between 1880 and 1914, Britain ran an average current-account surplus of 5% of GDP. In contrast, America today has a deficit of 7% of GDP. It seems perverse that poor countries today prefer to buy low-yielding American government bonds when they could earn higher returns by investing in their own economies.

So why are they doing it? One explanation is the so-called “Bretton Woods 2” thesis put forward three years ago by Michael Dooley, David Folkerts-Landau and Peter Garber at Deutsche Bank. (Bretton Woods was the system of fixed exchange rates that prevailed for a quarter of a century after the second world war.) They argue that Asian economies are pursuing a deliberate policy of currency undervaluation to ensure strong export-led growth. To hold their currencies down, Asian central banks have been buying lots of American Treasury bonds. This reduces interest rates and supports

consumer spending in the United States, allowing Americans to buy lots more Asian exports—which, the authors argue, suits both Asia and America.

Furthermore, they say, opening its doors to foreign direct investment (FDI) has helped China to build a world-class capital stock. Emerging economies with poorly developed financial markets are not good at allocating capital, so they buy Treasury bonds and let American firms do the domestic investment for them. Admittedly the return on Treasury bonds is lower than the return on FDI, but this, the authors reckon, is a small price to pay for more efficient domestic investment and hence faster long-term growth.

The bottom line of this theory is that the main blame for America's deficit lies with Asia's emerging economies, rather than with America itself. And because the arrangement is in those Asian countries' economic interest, the theory suggests, they will go on financing America's deficit for a good many years.

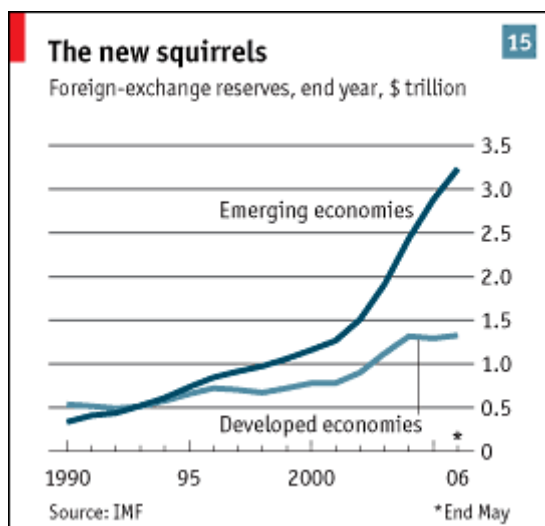
Lost in the woods

However, Morris Goldstein and Nicholas Lardy, at the Institute for International Economics in Washington, DC, argue that Bretton Woods 2 does not explain China's behaviour in the past, and it certainly would not be in China's interest to go on behaving that way in future. The first flaw in the theory is that America takes only one-fifth of China's exports, with Europe a close runner-up. So if China were trying to keep the yuan undervalued, it would surely do better to hold down its real trade-weighted exchange rate, which rose by 35% during the dollar's climb from 1994 to 2001.

China's main motive for tying the yuan closely to the dollar has been financial stability, not crude mercantilism. But now a rigid exchange rate looks as though it might become a source of instability. The large build-up of reserves that has resulted from currency intervention is creating excess liquidity, with its attendant risks of inflation, asset-price bubbles and a serious misallocation of capital.

The dollar “peg” has forced China to adopt an excessively lax monetary policy. Real interest rates of 3% are far too low for an economy growing at 10%, but there is little room to raise rates because that would attract more inflows of short-term capital and so require even greater intervention, further boosting liquidity. China needs a more flexible exchange rate so it can regain control of its monetary policy.

Another reason why building up yet more reserves is not in the interest of Asian central banks is that it would expose them to large future losses when their currencies do eventually appreciate against the dollar. Emerging economies hold 70% of global foreign-exchange reserves (see chart 15), mainly in dollars, and account for four of the top five holders of reserves (China, South Korea, Taiwan and Russia). By the end of this year China's reserves are likely to reach \$1 trillion. Messrs Roubini and Setser calculate that a 33% rise in the yuan—which is quite possible over several years—would imply a politically embarrassing capital loss of 15% of China's GDP. The longer that countries accumulate reserves, the bigger the potential losses.



A third defect in the Bretton Woods 2 theory, according to Messrs Goldstein and Lardy, is that in recent years FDI has financed less than 5% of China's fixed investment, clearly nowhere near enough to have helped create a world-class capital stock. The only way that China can ensure a better allocation of capital is by reforming its domestic financial system and by using higher interest rates to cool overinvestment. Again, that suggests it is now in China's own interest to allow more flexibility in its exchange rate, which means buying fewer Treasury bonds.

All this suggests that China now needs to set its currency free for the sake of its own economy, rather than America's. Indeed, a revaluation of the yuan by itself probably would not make much of a dent in America's current-account deficit, because it would not solve the structural imbalance between saving and investment. America has a huge deficit largely because it saves too little. Politicians, however, prefer to blame China.

The final nail in the coffin of Bretton Woods 2 is that the increase in China's external surplus has been much too small to account for America's deficit. Estimates for 2006 suggest that China's current-account surplus has widened by \$140 billion since 1997, whereas America's deficit has expanded by \$720 billion. By far the largest counterpart to America's deficit today is the group of emerging oil exporters, which have moved from rough balance in 1997 to an estimated surplus of \$425 billion this year—much larger than emerging Asia's total surplus of \$250 billion.

Oil exporters are determined not to repeat their mistakes after previous oil-price jumps. They have been much more cautious in spending their revenues, saving a larger share than in the past. So far, the bulk of petrodollars has probably gone into relatively liquid dollar assets. But these countries have greater reason than Asia to invest in non-dollar currencies, because they trade much less with America. And petrodollars are mostly managed by investment funds that aim to maximise returns, so oil exporters' assets are more footloose than those of Asian central banks and could quickly shift out of the dollar if it starts to slide again.

Too much of a good thing

Mr Bernanke has argued that America's deficit is the innocent by-product of a saving glut in emerging economies. If the rest of the world saves more than it invests (ie, runs a current-account surplus), then America has to run a deficit. The implication is that America's deficit is more sustainable than generally thought. But this still begs the

question of why emerging economies have excess saving when their return on investment is higher than in rich countries.

A paper presented by Raghuram Rajan, chief economist of the IMF, at this year's annual symposium of the Federal Reserve Bank of Kansas City offers a tentative explanation. Mr Rajan argues that fast-growing poor countries tend to generate more saving than they can use because of their underdeveloped financial systems.

Thus when a country experiences rapid productivity growth, consumers save much of their income gains. But the opportunities for transferring those savings into domestic investment through the financial system are limited, so saving typically exceeds investment and the country runs a current-account surplus. This also explains the unexpected finding that emerging economies that rely least on foreign finance tend to enjoy the fastest growth. Faster-growing economies simply generate more domestic saving.

But this means that capital flows to the United States are sustainable only as long as emerging economies' domestic financial systems remain immature and unable to offer the usual range of financial instruments; and such shortcomings have a clear economic cost. In the years ahead, as these countries' domestic financial systems develop, their current-account surpluses are likely to disappear.

How long might that take? Consider China, the thriftiest of them all, which saves almost 50% of its annual GDP. Many people believe that this is because Chinese households need to maintain a large financial cushion to make up for the lack of a social safety net and the absence of consumer credit. However, Louis Kuijs, an economist at the World Bank, says that China's household saving rate, at 16% of GDP, is not abnormally high; in fact, it is lower than India's. What pushes the overall rate to such exalted levels is huge saving by companies and by the government. State firms do not pay dividends, so high profits in recent years have pushed up their saving. Government saving is also unusually high.

On the basis of current policies and expected changes in income and demographics, Mr Kuijs predicts that China's saving rate will fall only modestly over the coming years, still leaving a substantial current-account surplus in two decades' time. But if the government implements reforms, forcing firms to pay dividends, liberalising financial markets and spending more on health and education, then China's current account could be brought into rough balance by 2020, he says.

However, another World Bank paper, by David Dollar and Aart Kraay, suggests that China could be running sizeable deficits by then. The authors say that it does not make sense for China to be a large net supplier of capital to the rest of the world when its productivity is growing rapidly and its capital-labour ratio is only one-tenth of that in America. They put this distortion down mainly to extensive capital controls that prevent residents from borrowing abroad and foreigners from investing in China. If all capital controls were scrapped and the government pushed ahead with economic and financial reforms, China would run a current-account deficit of 2-5% of GDP, they reckon.

Capital-market reforms should also bring down net saving in other emerging economies. In other words, at some time in the future, emerging economies may no

longer provide capital to the rest of the world, but instead run current-account deficits. This will increase the global cost of capital, especially in America.

But before that happens, emerging economies' investment in foreign assets is likely to change its composition, favouring corporate assets rather than low-yielding Treasury bonds. The snag is that American politicians are most reluctant to allow Chinese, Russian or Middle Eastern firms to have a controlling interest in American firms: witness the failed attempt by China's CNOOC, a state-owned oil company, to buy Unocal last year, and Dubai Ports World's aborted takeover of several American ports this year. As long as America depends on foreign capital, it needs to be less picky.

The world's present external imbalances are neither desirable nor sustainable. Those who argue that poor countries will continue to finance America's current-account deficit long into the future seem to forget that one day it will have to pay back the money.

Nor are the current arrangements in the long-term interest of America's economy. By buying dollar assets, Asian central banks are subsidising American consumers, encouraging too little saving, too much spending and excessive investment in housing. Asia's central banks have turned off the usual market signal of rising bond yields which should be telling America to put its house in order. As long as America can get cheap money from abroad, it has little incentive to rebalance its economy.

When global imbalances are eventually unwound, the process will hurt even more. Unless America reduces its deficit before emerging economies lose interest in accumulating reserves, the dollar, Treasury bonds and the whole American economy are likely to suffer a hard landing.

Playing leapfrog

Sep 14th 2006

From *The Economist* print edition

If today's rich world does not watch out, it could become tomorrow's relatively poor world

ALEXIS DE TOCQUEVILLE once observed that the French hate anybody who is superior, and the English like to have inferiors to look down upon. These two nations were long ago knocked off their pedestals. Now it is the Americans who fret about losing their economic supremacy. If China continues with its reforms, one day it will become the world's biggest economy. Should America care?

Being the biggest economy has its attractions. It helps to provide military security and gives a country more clout in global economic affairs. Being the main reserve currency is also useful. America's ability to borrow and to settle its imports in dollars has saved it from paying more interest to finance its profligate ways.

However, remaining number one cannot be an end in itself. The goal of economic policy should be to improve living standards, which depend on a country's absolute, not relative, rate of growth. Indeed, an obsession with remaining number one could lead America to adopt policies that are likely to hasten the day China pulls ahead.

Trade barriers, subsidies and restrictions on offshoring merely shield inefficient firms that need to become more productive if America is to thrive.

If rich economies raise import barriers in the misguided belief that they will protect Western living standards, they could destroy the main source of wealth-creation in the 21st century. They could also deny better living standards to hundreds of millions of people in the developing world. It is rich countries' fear of emerging economies' success, not that success itself, that is the real danger to the world economy. It would be ironic if the triumph of free trade and market economics in the emerging economies were to turn the rich world more protectionist and interventionist. If they continued down that path, today's rich countries might even end up as tomorrow's (relatively) poor ones.

That might sound far-fetched, yet China, once the world's technological leader, provides a sobering lesson on how economies can slide down the international league table. In the 18th century it was the world's biggest economy, with a GDP seven times as large as Britain's. But it kept its doors closed to foreign goods, so it was left behind by the industrial revolution and the explosion in global trade.

In 1793 Lord George Macartney was sent to Peking by King George III to establish a permanent British presence and open up trade relations with China. But the Chinese emperor Qianlong informed his visitor that “we have not the slightest need of your country's manufactures.” China's economic isolation was to last for almost another 200 years, during which real incomes fell. By 1950 China's GDP per person had shrunk by a quarter compared with Lord Macartney's day; Britain's had risen fivefold.

In America today the drumbeat of protectionism is getting louder. As this survey has argued, that is because although globalisation benefits economies as a whole, the gains are unevenly distributed, and the costs—job losses and lower wages—are much more visible than the wider benefits to consumers generally. Workers tend to be better organised and more vocal than consumers.

In recent years, as profits have surged, most workers' real incomes have been flat or even falling; only those near the top of the tree have enjoyed big pay rises. Globalisation has shifted the balance of power against workers and in favour of companies. But unless ordinary folk are seen to share in the gains from globalisation, there will be growing demands for import barriers or much higher taxes on booming company profits.

The trouble is that, in a globalised economy, policies aimed at fleecing companies will fail to spread the rewards more widely. Firms will simply move to a more congenial environment. The best way to boost national economic prosperity is to make labour and product markets work more efficiently, speed up the shift of jobs from old industries to better-paying new ones, and improve education and training to prepare workers for tomorrow's jobs.

But that may not be enough. Governments may need to tackle sluggish wage growth and increased inequality more directly. Rich economies as a whole gain from the new wealth of emerging ones, so governments have ample scope to compensate the losers, but they rarely do. Yet there may be a case for helping out those who lose their jobs or have to manage on lower pay in order to ensure continued political support for free trade. The challenge for governments is to find ways to share out the fruits of

globalisation more fairly without undermining the economy's ability to reap the benefits.

Shifts in economic power tend to be associated with disruptions in the world economy, and are rarely smooth. The globalisation that followed the industrial revolution was brought to an end by two world wars, high protectionist barriers and the Great Depression. Now the rise in emerging economies is once again altering power relations among states and creating new geopolitical risks. This new revolution, too, is bound to bring forth its share of disagreements.

How should the world's policymakers respond to the developing world's growing economic power? Big emerging economies will need to be given a larger stake in the smooth running of the world economy. As the world's fourth-biggest economy in dollar terms (and second-biggest at PPP), China should be a full member of all international economic policy forums, such as the G7 and the OECD. Yet these organisations remain firmly in the hands of the old rich economies. How can governments sensibly talk about pressing issues such as global imbalances or energy prices without China being present? The G7 should be pruned to a G4, consisting of America, Japan, the euro area and China; and the status of the G20, which already includes emerging as well as advanced countries, should be elevated.

IMF members meeting in Singapore this month are expected to agree to give more votes on the organisation's board to some of the bigger emerging economies, in recognition of their growing weight in the world. Several developing countries, especially in Asia, are hugely underrepresented, whereas rich European economies are overrepresented. China currently has only 3% of the total vote, not much more than Belgium (with 2.2%), even though China's economy is seven times larger at market exchange rates and a lot bigger still at purchasing-power parity.

America v Europe

Which developed economies will gain most from the emerging economies' new economic muscle? Conventional wisdom has it that America's economy is coping much better than Europe's with competition from emerging economies, thanks to its flexible labour and product markets. According to this view of the world, Europe is having a tough time dealing with globalisation, burdened by high minimum wages, extensive job protection, high taxes and generous welfare benefits. Many people blame the euro area's sluggish growth in output and jobs in recent years on its loss of global competitiveness.

But conventional wisdom may have got it wrong. Since 1997 employment in the euro area has grown slightly faster than in America. Over the past decade, European firms have been much more successful than America in holding down unit labour costs and thus remaining competitive. And since 2000 the euro area's share of world export markets has risen slightly, to 17%, whereas America's share has slumped from 14% to 10%. Thus, by many measures of competitiveness, Europe appears to be coping better with the emerging economies than America.

The main reason why America's economy has been growing faster than Europe's is that sluggish real wages have been offset by large capital gains on homes, massive borrowing and an unsustainable fall in saving, all of which have boosted American household spending. If (when) house prices fall and consumers wake up to the fact

that they are not saving enough, consumer spending will weaken perceptibly. Americans need to prepare for a recession or, at best, a prolonged period of below-trend growth.

In a few years' time, the relative economic fortunes of America and the euro area could be reversed. A report by IXIS, a French investment bank, suggests that Germany and Japan are much better placed to benefit from growth in emerging economies than America or Britain. Germany and Japan export 7-9% of their GDP to emerging economies; the equivalent figure for America and Britain is only around 3% (see chart 16). France and Italy are somewhere in-between. The euro area's exports to emerging economies have grown by an annual average of 14% since 2000, twice as fast as America's.



A report by Goldman Sachs also finds that by some measures Europe has benefited more than America from trading with the BRICs. The bank concludes that Germany and France are set to enjoy big gains. Italy, Greece and Portugal are less well placed because the make-up of their exports is closer to that of the BRICs, so they will face head-on competition.

For globalisation to benefit economies, resources must be reallocated towards higher-value-added goods and services. So to reap the full gains, Europe must urgently push ahead with making its markets more flexible and open. A study by the European Commission concludes that, if the European Union were fully to embrace the rise of China and India, its GDP per person by 2050 could be up to 8% higher than it would otherwise have been, implying a boost to average annual growth of 0.2% over the period. If, on the other hand, EU countries lurch towards more protectionist policies, GDP per head could be 5% lower than in the base case.

Japanese firms and workers have even less reason than American and European ones to fear China's economic might. Japan has been a major beneficiary of regional integration in Asia, and China is likely to overtake America as Japan's biggest trade partner by the end of this year. Japanese firms have invested heavily in China, shipping capital-intensive components there to be processed and assembled by cheap labour before being re-exported. Exports to China have played a big part in Japan's export growth in recent years, helping to spur its economic recovery. A survey by the *Nihon Keizai Shimbun* found that most big Japanese firms think a large appreciation of

the yuan would not be in their interest because they have moved so much of their production to China.

Coming of age

The fact that people in rich countries are fretting about the emerging economies' success, rather than just their poverty, is itself a remarkable tribute to the progress those economies have made. Poverty in the third world is still rife, but rising incomes there should be welcomed by all. As long as they continue on their path of reform, there is an excellent chance that their rapid expansion can be sustained for several more decades.

China and India offer immense opportunities, but they also bring new risks. If these economies stumble, or even if they simply decide to sell their American Treasury bonds, the world will certainly notice. Because of the emerging economies' increased economic weight, a crisis there would have a much bigger impact on the global economy than formerly.

It is important to keep a sense of perspective. America still remains the world's biggest manufacturer, some way ahead of China. On visiting Beijing and Shanghai, many foreigners conclude that China is already a wealthy economy, yet China and India have more poor people than Africa does. Conversely, sceptics who try to downplay the importance of China and India underestimate the huge adjustments that lie ahead. China's vast labour force and its unusual openness to trade mean that its global impact is bound to increase. One day it will regain its place as the world's largest economy. And China is only one among scores of emerging economies that look set to prosper.

When your correspondent started as a journalist at *The Economist* in 1985, the world economy she was writing about consisted largely of the G7 economies. Twenty-one years later the emerging economies have come of age. To understand the world economy, it is now necessary to understand and track the new world, especially Asia. That is why this correspondent is about to move herself and her economic toolkit from London to Hong Kong.

Author interview

Sep 14th 2006

From Economist.com

A discussion with [Pam Woodall](#), Asian Economics Editor of *The Economist*



“World growth, world inflation, world interest rates, wages, profits, oil prices and even house prices are all now being influenced by China, India and other developing economies”

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