# Major global developments in the new millennium

*Dr Alan Bollard, Governor, and Mark Smith, Economics Department*

This article is an abridged version of a paper prepared for an address to the Canterbury Employers' Chamber of Commerce, on January 27, 2006.[1] It examines three major global developments that have occurred in recent years and discusses their impact on the New Zealand economy in terms of their effect on relative prices. These developments include (i) closer integration of China and other emerging economies with large pools of labour, (ii), a housing market boom in some OECD countries, and (iii) recent geopolitical and biosecurity events. The monetary and financial stability policy implications of these developments are discussed as are some lessons for households, businesses and public policymakers.

## 1 Introduction

At the start of this millennium few of us could have appreciated the full nature and magnitude of changes that were occurring in the world economy. These events are making a big difference to the prices of particular goods and services relative to the general level of prices within the global economy. In turn, this has influenced the cost and return of factor inputs and outputs and has facilitated quite large shifts in resource allocation and income distribution.

We focus on three key developments and examine the impact of each on relative prices. Although these developments can be broadly categorised under different headings they are probably interconnected.

- The integration of China, and other emerging market economies with large reserves of labour, into the global economy. The boost to global incomes and scale of industrialisation taking place suggests another major global industrial revolution is now under way. This structural shift in global production and trade has lowered the global price of labour relative to commodities and other factors of production and has affected global saving and investment flows. These changes have been in parallel with developments in the retail sector which in turn have improved the access of consumers in OECD countries to low-cost products.
- A housing boom in some OECD countries which has been underpinned by a lower cost of capital and a change in preferences towards housing from other investments. This has lifted house prices relative to labour earnings and prices for other goods and services. Stronger household balance sheets have boosted demand and inflationary pressures in some OECD countries, including New Zealand. However, they have also contributed to greater economic imbalances and potentially raised the risk of a house price correction.
- An increased 'premium' placed on security arising from geopolitical and biosecurity considerations, global warming and acts of nature. These events heightened the risk of weaker global economic growth and imply temporary additional monetary policy accommodation to offset actual or projected declines in economic activity. So far, worst case scenarios on many of these events have not eventuated. Nevertheless, the risk of an occurrence has shifted relative prices in favour of more 'secure' countries.

The article then looks at whether similar events have occurred over history. As these shocks are likely to have offsetting or reinforcing effects, their overall impact on monetary policy and financial stability is discussed. We are particularly interested in how they have affected New Zealand's relative competitiveness in the world. The article concludes by outlining some key lessons for firms, households and policymakers.

## 2 Emergence of China and other economies

### Introduction

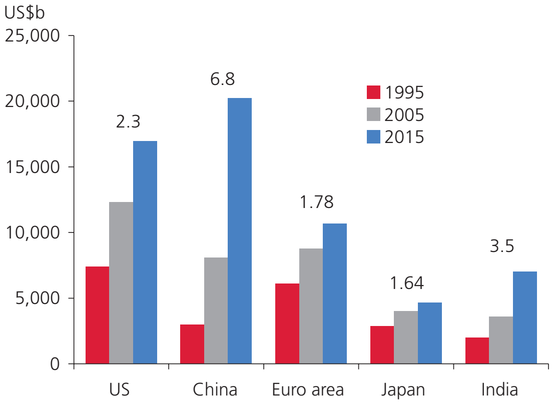
Economic developments in China today receive considerably more attention from policymakers and the public in the developed world, than even five years ago. This heightened focus reflects China's large population, its strong rates of

[1] See http://www.rbnz.govt.nz/speeches/2233440.html

economic growth and its intensely competitive manufacturing sector that has created extremely challenging conditions for manufacturers throughout the OECD. Similar focus is also being placed on other rapidly developing economies with large populations, including India.

Per-capita incomes in China and India are significantly below the OECD average and are likely to remain so for some time. However, faster growth is expected in emerging economies as they catch up to international best practice by adopting modern technology and business practices and lifting trade and investment. In purchasing power parity (PPP) terms the Chinese economy is expected to overtake the US as the world's largest economy by 2015 in terms of measured output.[2]

Figure 1
The world economy in 10 years' time
*GDP at purchasing power parities, 2015 PPP multiple of 1995 level in chart*

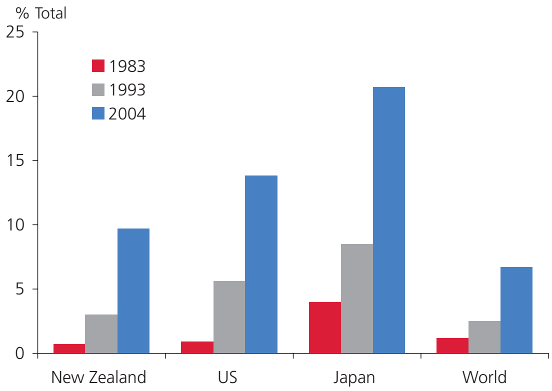


Source:ANZ,Consensus Forecasts.

A key feature of China's expansion has been its burgeoning participation in international trade – contributing to the process we know as globalisation. Greater mobility of capital and trade will encourage increased specialisation and investment in lower cost centres of production, and is likely to boost global income.[3] Rising Chinese manufacturing capacity and cheaper production costs have translated into a rise in import penetration of Chinese goods and services. While Asia's traditional trade with OECD countries continues to expand and intensify, intra-Asian trade growth has been even more brisk.

International outsourcing (where material inputs are procured from firms in foreign countries) is becoming more widespread. It has contributed to the hollowing out of parts of the manufacturing sector in OECD countries, with industries such as steel, electronics, and chemicals shifting to lower cost centres, such as China. Similar changes are happening in the services industry, with the relocation of call centres and other semi-skilled functions to lower-cost destinations such as India.

Figure 2
Chinese share of merchandise imports
*calendar years*



Source: WTO, Statistics New Zealand

## Key drivers

What have been the key factors driving the integration of China and other emerging markets into the global economy?

### *Economic reform and trade liberalisation*

Over the last 25 years the rapid pace of economic liberalisation of the Chinese economy has been managed by the Chinese authorities:

- reforms to reduce central planning and open the Chinese economy to market forces in the late 1970s;

[2] PPP measures of GDP equalise purchasing power of different currencies by eliminating the differences in price levels between countries. As price levels in developing countries are much lower PPP estimates of GDP are higher relative to OECD countries. Revised nominal GDP estimates place the Chinese economy as the world's sixth largest in 2004 (around $2 billion USD), after the US, Japan, Germany, UK, and France.

[3] World Bank (2002) estimates suggest that global incomes would rise by USD2.8 trillion over a decade if trade was liberalised. More than half of this increase would accrue to developing countries. Since 1990 global merchandise trade has grown nearly three times faster than output (WTO 2005).

- creation of special economic zones to promote promoting more business friendly conditions and reforms to land ownership from the early 1980s; and
- privatisation of Chinese SOEs and the relaxation of restrictions to foreign ownership from the 1990s.

Improved market access has also underpinned the growing integration of China and other emerging economies into the global trade system. A significant milestone on the path to greater trade liberalisation was the formation of the World Trade Organisation during the Uruguay round of multilateral trade negotiations in 1994.[4] In New Zealand, the lifting of import protection on textiles and manufactured goods in the early 1990s contributed to rising import penetration. Efforts to reduce trade barriers are also being pursued on intra-regional and bilateral fronts.

## Technological change, innovation and changing tastes

Increasing standardisation in shipping and transportation has facilitated the movement of products from producers to consumers. Changing tastes, rising incomes and technological progress have supported strong increases in services trade – financial, communications, transportation, and professional services, as well as tourism. Greenspan (2005c) asserts that since the 1990s technological advances and the dismantling of restrictions on capital flows have contributed to increasing globalisation of investment flows via reducing the home bias of investment. To meet changing tastes the production mix of goods and services is evolving in both OECD and non-OECD economies.

There have been significant changes in the retail environment, which have improved the access of low-cost products to consumers in OECD countries. This so-called 'Wal-Mart effect' has seen the emergence of retailers whose large scale, greater global buying power and better logistics have enabled economies of scale to be realised. In turn, this has contributed to increasing competition and margin compression in parts of the retail sector.[5] A New Zealand study by Kite (2005) reports a sizeable expansion in both the number and average size of retail stores operating in New Zealand over the past five years.

## Impact on the New Zealand economy

Globalisation and strong growth in emerging economies contribute to alleviating global poverty as output and incomes are boosted.[6] Higher global incomes and greater mobility of trade and capital flows are likely to confer significant benefits to the New Zealand economy, although the gains will not be evenly shared.

Some of the impacts on the New Zealand economy include:

### *A higher terms of trade*

The terms of trade measures the effective purchasing power of exports and is an important determinant of incomes. Closer integration of China into the world economy should help improve the allocation of global resources and lead to a higher and more sustainable global growth path than otherwise. However, some labour-abundant developing countries will incur a loss in welfare and lower terms of trade as the relative price of resource inputs and capital-intensive goods and services rises. The terms of trade in New Zealand are currently around their highest since the early 1970s, as they are in other commodity-exporting countries, including Australia and Canada.

The combined influence of greater production capacity worldwide, more intense global competition and increasing productivity have reduced prices for manufacturing goods. Hodgetts (2005) finds that since 1997 the estimated foreign currency price of imported manufactures into New Zealand has fallen by an average of about $2^1/_2$ per cent per annum, whereas up until 1996 the norm had been for positive rates of inflation.

4 China joined the WTO in 2001. India has been a WTO member since 1995. More progress has been made in some sectors than others. Further efforts to reduce global barriers to trade in agriculture and services are under way in the current WTO Doha round.

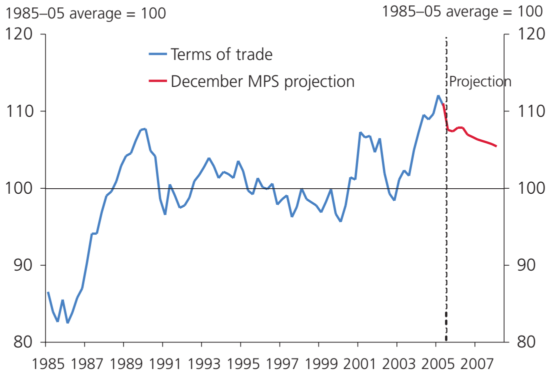
5 See early studies by Julius (1999) and Solow (2001).

6 For example, World Bank (2002) estimates suggest that global incomes would rise by USD2.8 trillion over a decade if trade was liberalised. More than half of this increase would accrue to developing countries.

Conversely, prices for commodities have been boosted by cyclical recovery in OECD economies, capacity constraints and stronger demand from emerging economies. In New Zealand's case, rising global incomes and the demand for protein underpinned strong demand for agricultural exports and contributed to the high New Zealand dollar. OECD (2005a) long-term projections suggest that much of the increase in global demand for agricultural commodities is likely to come from non-OECD economies. Progress made in reducing agricultural trade barriers in the early 1990s has underpinned prices for New Zealand's agricultural exports. Offsetting this have been strong increases in prices for New Zealand's commodity imports (including oil and metals).

The medium to long run outlook for New Zealand's terms of trade is uncertain. Although manufacturing import price inflation is likely to remain subdued, it is unclear how much of the strength of agricultural export prices reflects temporary cyclical factors that are unlikely to persist indefinitely. There are also considerable uncertainties on the outlook for oil and other imported commodities.

### Figure 3
### Goods terms of trade
### *New Zealand*



Source: Statistics New Zealand, RBNZ estimates

#### *Changes in sector growth and employment*

Restructuring in the 1980s and early 1990s, technological change and innovation, and the increase in international competition have contributed to an increase in employment and output in the services sector relative to manufacturing and agriculture – see Table 1.

The decline in the relative importance of manufacturing in New Zealand and a corresponding increase in services is a trend seen in many other OECD countries. There is no

### Table 1
### Share of the New Zealand economy
### *June years unless noted otherwise*

| | 1990 | 1995 | 2000 | 2005 |
|---|---|---|---|---|
| *Manufacturing* | | | | |
| Output | 17.9 | 17.4 | 15.1 | 12.4 |
| Employment (hours worked) | 18.1 | 19.2 | 17.1 | 15.4 |
| Export volumes | 14.0 | 17.4 | 19.7 | 19.1† |
| | | | | |
| *Services* | | | | |
| Output | 62.9 | 63.6 | 65.4 | 67.2 |
| Employment (hours worked) | - | 61.6* | 61.9 | 65.0 |
| Export volumes | 22.9 | 29.0 | 31.3 | 31.8 |
| | | | | |
| *Agriculture* | | | | |
| Output | 4.9 | 5.1 | 5.2 | 4.5 |
| Employment (hours worked) | 12.4# | 11.4# | 10.2# | 8.3# |
| Export volumes | 33.1 | 29.9 | 29.2 | 28.4 |

† March year
* September 1997 year
# Agriculture, forestry, fishing subgroup
Source: Statistics New Zealand, RBNZ estimates

denying that global pressures have facilitated job losses in some industries and a degree of economic dislocation. What is often forgotten however is that resources are continuing to shift to areas where comparative advantages or niche market opportunities can be realised. In the manufacturing sector there has been substantial growth in output and employment seen in areas such as meat and dairy processing, and electronic equipment and photographic and scientific equipment manufacturing in recent years.

As emerging economies are growing more quickly than our traditional trading partners, it follows that these economies are becoming more important trading partners for New Zealand. Trade with China now accounts for roughly 8 per cent of New Zealand's total merchandise trade, compared to less than 5 per cent at the start of the decade and 1-2 per cent in the early 1990s.[7]

### *Greater influence of global factors on inflation*

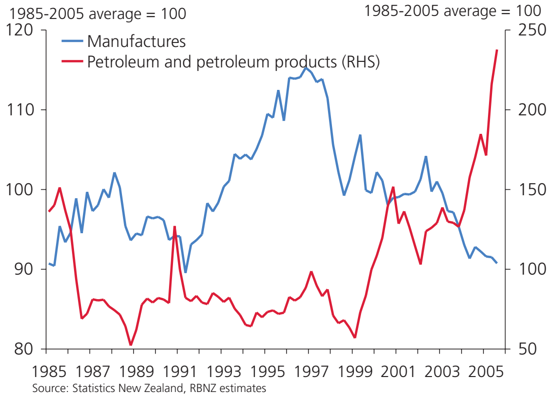
Policymakers have generally been surprised at how well - contained inflationary pressures have been, given the sharp increases in world oil prices and strong pace of global expansion. Low-cost manufactured imports have dampened tradeable inflation and contributed to low rates of core inflation rates being maintained. Sharply rising oil prices have contributed to a wedge between core and headline inflation rates.

Globalisation may have affected the inflation process. Recent analysis from the Bank for International Settlements (2005) suggests that global forces have become more important relative to domestic factors in determining inflation in individual countries.[8] BIS research into pricing power shows the correlation between domestic cost pressures and core inflation diminishing in their sample of G7 economies. Hodgetts (2005) notes that in the New Zealand case there is some evidence that traditional cost-push model of inflation has become less relevant, with the previously tight linkage between wages and CPI inflation having weakened considerably.

[7] China is now New Zealand's fourth largest merchandise trading partner behind Australia, the US and Japan.

[8] See "A foreign affair", *Economist* print edition, October 2005.

Figure 4
Implied world prices of New Zealand's imports



Source: Statistics New Zealand, RBNZ estimates

Initially the more benign global inflationary environment has made it easier to achieve inflation objectives, although sizeable increases in energy and commodity prices over the past couple of years have offset this to some extent. Policy also needs to remain aware of inflationary developments in sectors protected from international competition, particularly if these have a persistent impact on generalised inflationary pressures.

### *Higher emerging economy savings and greater vulnerability to sector-specific shocks*

Increased international integration of both goods and financial markets can provide diversification benefits, but this can leave the economy more vulnerable to regional and sector-specific shocks. Rapid economic growth can raise the challenges being faced by financial systems.

Unlike most other historical examples, the strong growth rates currently displayed by emerging economies have coincided with large trade and current account surpluses being accumulated. Some of these proceeds have been used to fund savings shortfalls in some OECD countries, via purchases of financial assets.

Strong growth in world demand from emerging economies has placed the supply capacity for some commodities under pressure. Although the International Energy Agency and IMF believe reserves of energy will be adequate to meet increased demands, oil prices are likely to remain volatile while capacity constraints in oil extraction, refining and transportation remain. Low spare capacity is believed to be the consequence of low investment that occurred when oil prices were considerably lower than they are now.

*Is this a new phenomenon?*

The 1960s saw the emergence of Japan as a low cost producer of manufacturing goods. It was not until the global downturn of the early 1980s, however, that US policymakers became concerned over the impact of increasing global competition. As in the 1980s, growing trade deficits in the US have prompted a rise of protectionist sentiment. There is also pressure for more exchange rate flexibility and further trade liberalisation for emerging economies to help rectify widening trade and investment imbalances.

The greater influence of emerging economies on the global economy and changes to global savings and investment flows requires more careful monitoring and analysis of developments and potential risks in these countries by policymakers. History tells us that imbalances in trade and current account positions are unlikely to continue indefinitely, and may eventually reverse. It does not tell us precisely when an adjustment is likely to occur and in what form it could take.

Although there are some historical parallels, the orders of magnitudes posed by closer integration of a significant pool of labour are considerably larger. Local firms face challenges, not only those in manufacturing but other industries where cheaper foreign competition is emerging. Raising productivity growth remains a key challenge, as does targeting specific niche markets, and making better use of our comparative advantages. Rapid economic development in these economies provides opportunities for some sectors of the New Zealand economy, but greater challenges for other sectors. Monetary policy has to focus on the overall impact on activity and inflation so there is little it can do to relieve pressures in particular sectors.

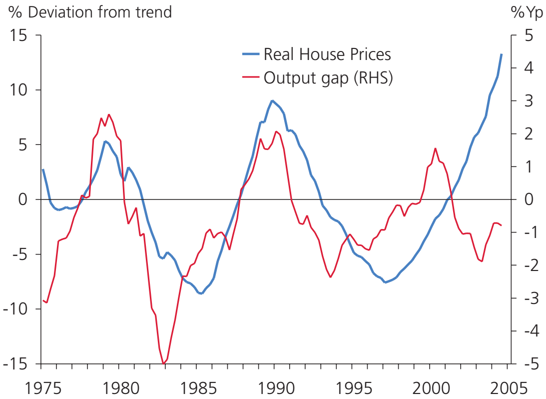
# 3 The housing market boom

## Introduction

A number of OECD countries have experienced sizeable increases in real estate values in recent years. In the New Zealand case, the period of house price growth has been larger than at any time in our recent history. Traditionally, the housing market has played a key role in the economic cycle of many OECD economies, and its performance is sometimes regarded as an important barometer to future macroeconomic outcomes. What is different this time around, however, is how out of step movements in house prices have been with the OECD business cycle.

Figure 5

OECD real house prices and the business cycle



Source: OECD

## Contributing factors

The following are commonly listed as the key influences contributing to the buoyancy in residential property markets. Although factors affecting housing markets can have a very local flavour, others have a global aspect.

*Low nominal interest rates*

Over the last few years policy interest rates in a number of countries were reduced to historically low levels. As the housing market is mostly debt financed the demand for residential property has responded to lower interest rates. A benign global inflationary environment and expectations that policymakers would keep inflation low have acted to dampen long-term interest rates.[9] Despite economic

[9] A 'global glut' of foreign savings may also have had an influence.

prospects having brightened and policy accommodation being removed, longer-term interest rates overseas have remained quite low and are something of a 'conundrum', according to Alan Greenspan.

### *Financial liberalisation and globalisation*

Greater use of revolving credit facilities and other financial products have enabled households to consolidate their balance sheets and also tap into the increased equity of their homes. In the US increasing use of home equity-linked financing (including revolving credit facilities, interest only mortgages, and reverse annuity mortgages) have provided home owners with access to more funds.

Increasing globalisation has improved the access of liquidity-constrained households to large pools of savings held by other countries. In New Zealand's case, our comparatively high interest rates have prompted strong interest in Eurokiwi and Uridashi bonds amongst retail investors in Europe and Japan.[10] This, along with institutional investment directly in New Zealand's wholesale interest rate markets, has been a factor in enabling banks to offer fixed interest rate mortgage products at rates below variable mortgage rates. There has been a significant take up of these products, particularly for terms of one to three years.

## Rising household incomes and expectations

Over the last few years improving labour market conditions in some OECD countries have contributed to strong growth in labour incomes. Household purchasing power has also been boosted from lower prices for imported consumption goods that have provided more income for other uses (including housing). Low unemployment has contributed to high job security and has reduced precautionary savings.

Expectations also have a role to play. It is possible that the rise in property values (and household debt) partly reflects households having raised their expectations of future income growth. The shift towards dual income households may have underpinned this, although it could be the consequence, rather than the cause of rising property values.

In some OECD countries the rise in property values is not confined to residential property. In part this reflects the expectation by investors that interest rates are likely to remain relatively low. In New Zealand the increase in rural land prices may also partly reflect higher perceived and actual returns, as represented by the strong climb in world agricultural commodity prices in recent years.

### *Changes to population/preferences*

Population inflows tend to boost the demand for housing and coincide with periods of housing market strength and residential construction activity. Migration flows within countries are also likely to have contributed to differences in regional housing markets. External migration has played a key role in some countries, including New Zealand.

Changes in the population structure may have an influence on the demand for housing as an investment good. Baby boomers nearing retirement age may be looking to invest their savings in rental property assets that appear to provide more secure cash flow. The trend towards living in inner city apartments and townhouses has boosted construction activity, whereas the growing attractiveness of coastal property has boosted coastal property values. Increasing globalisation may also have raised foreign investment in residential property. In parts of Europe this is evidenced by rising foreign ownership of properties in countries where property values are still perceived to be relatively cheap. Similar perceptions are likely to have underpinned greater foreign investment in New Zealand residential property.

In the case of New Zealand a lack of depth in local equity markets, potential tax advantages from owning investment properties and little confidence in alternative savings vehicles may have encouraged greater investment in residential property. This has underpinned property values and resulted in a decline in rental yields.

### *Supply side rigidities*

The supply of land is fixed. In a period of strong demand the price of land and existing dwellings rises. There are also lags in the construction process as supply cannot adjust

[10] See Munro et al (2005).

instantaneously to higher demand. In some countries higher compliance costs in the construction industry and planning restrictions may also have limited the supply side response. Another contributing factor is the shortage of labour in the construction industry, which is partly a reflection of strong labour market conditions in recent years.

## Impact on New Zealand and other OECD economies

Stronger household balance sheets of homeowners combined with favourable labour market conditions and low interest rates have fuelled an increase in consumer spending.

The resulting savings and investment imbalances have contributed to rising levels of household debt and large trade and current account deficits in New Zealand and some other OECD countries, including the US and Australia. The willingness of foreign savers to continue providing low-cost funding to borrowers in these countries may waver if the risks of default or currency depreciation increase.

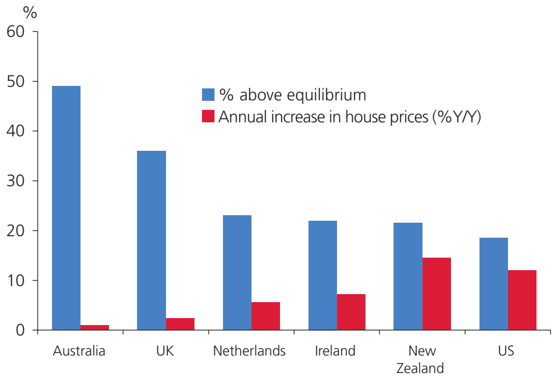
## Is this a new phenomenon?

Developments in the housing market now have a potentially greater influence in the world economy. Consequences of associated high household debt levels are not well understood, but it is likely that economies could be more vulnerable to shocks hitting household sectors. In some OECD countries the increase in household debt has contributed to deteriorating savings and investment imbalances, which has manifest in widening trade and current account deficits.

Strongly rising house prices have pushed up the value of houses relative to fundamental determinants. After taking into account the impact of falling nominal interest rates on affordability a 2005 OECD study suggested that house prices are above fair value in most countries. Although a gradual correction appears to be under way in Australia and the UK (see figure 6), there remains a risk that a significant rise in interest rates or sharp falls to labour incomes could trigger a more severe adjustment. As household wealth in New Zealand is likely to be less diversified than wealth in other countries, household balance sheets here are likely to be more susceptible to shocks affecting housing wealth. In particular, households with high levels of debt relative to their income and assets are likely to be more vulnerable to adverse shocks to debt servicing and property values than other households.

Rising residential property values have raised the issue of how monetary policy should respond to asset price movements.[11] In practice this can prove problematic as it can be difficult at the time to identify house price misalignments. House prices could also be displaying quite different regional trends. Targeting the housing market directly may also be inconsistent with meeting inflation objectives, and could lead to unnecessary volatility in output, employment, and interest and exchange rates.

### Figure 6
### House price to rent ratio
### *updated OECD estimates for 2005Q3*




Source: Economist, OECD

To better insulate themselves against a fall in house prices, homeowners need to live within their means and ensure their expectations of future income and house price growth are realistic. In the current environment where gains to house prices may not have been fully underpinned by fundamentals, households need to look carefully at their spending decisions and focus on improving savings.

[11] See Bollard (2004a).

# 4 Geopolitical tensions, climate change, biosecurity, natural disasters

## Introduction

The final group of events are more difficult to categorise under a single heading. Each has different underlying causes, and the effects are likely to be quite different. Many of these events have occurred without warning, whereas others have been anticipated. A common thread, however, is that these events have raised the premium placed on safety or security.

## Geopolitical tensions, disease, climate change, biosecurity and natural disasters

The economic costs of geopolitical disturbances are substantial. Aside from the immediate disruption and loss of life there are significant ongoing costs from increased security measures. An APEC (2005) report estimated the total costs to the US economy from the September 11 terrorist attacks in 2001 at approximately USD 660 billion.[12] The large number of anti-capitalism and anti-globalisation protests may also have contributed to a perceived decline in societal cohesion and stability.

Disease outbreaks have also caused disruption and heightened concerns over human safety. In 2003 the Severe Acute Respiratory Syndrome (SARS) outbreak in Asia infected more than 8,000 people and impeded trade and tourist flows in the region. The Avian Influenza A (H5N1) outbreak is the latest to hit world headlines. Its high mortality rate has the potential to cause significant upheaval and draws comparison to the Spanish Influenza epidemic in 1918/19 which killed 40–50 million people worldwide. So far the effects of H5N1 on human life have been relatively minor as the virus is yet to have fully crossed the species barrier from animals to humans. However, due to increasing globalisation, containing a human-to-human outbreak is likely to prove difficult.[13]

There has been increasing focus on potential climate change and its impacts. The exact causes of global warming are a source of debate but most scientists believe human activities are a major contributor to increasing concentrations of carbon dioxide, which have enhanced the heat-trapping capability of the earth's atmosphere.[14] Further industrialisation of emerging economies is likely to place greater demands on the provision of energy and raw materials. Despite efforts to reduce emissions via greater efforts on conservation and the Kyoto Protocol, continued development of the global economy is likely to contribute to more $CO_2$ emissions over the next few decades.[15]

Warmer temperatures have generated higher rainfall but its distribution is uneven – areas of high rainfall are generally getting more, whereas substantial drying and more droughts are occurring in other areas. Rising sea levels are a looming issue, particularly in islands and low-lying coastal areas, where population growth has been particularly strong. In New Zealand the west coast is generally getting wetter, while the east is getting drier.

Surprise natural events have had a major effect. The Northern Sumatra earthquake in December 2004, measured 9.0 on the Richter scale, the fourth largest since 1900. More than 200,000 people were killed and more than 2 million displaced by the earthquakes and subsequent tsunami in South Asia and East Africa. Earthquakes in Kashmir also resulted in significant casualties and disruption in the region. Flooding and hurricanes in the US have also caused significant damage and disruptions to economic activity.

12 Rising transaction costs from more stringent security measures and fewer tourists are estimated to account for more than 90 per cent of the total costs. We note there is no global consensus on what terrorism means. The APEC study does not propose a precise definition of terrorism but describes it as occupying a space along the continuum between civil disobedience and armed insurrection.

13 See studies by the Asian Development Bank (2005) and Congressional Budget Office (2005) for illustrative impacts on the Asian and US economies. A New Zealand Treasury (2005) report provides a preliminary assessment of the potential impact of a severe pandemic in New Zealand.

14 The earth's average temperature has increased by about 0.6 degrees Celsius over the past 100 years, whereas sea levels have risen by 10–20 cm. The 20th century's 10 warmest years all occurred in the last 15 years of the century.

15 IEA projections suggest $CO_2$ emissions will be approximately 50 per cent higher than today by 2030.

## Impact on the New Zealand economy

Quantifying the precise economic impacts of these events is difficult. Instead we illustrate potential linkages through which these factors affect the New Zealand economy.

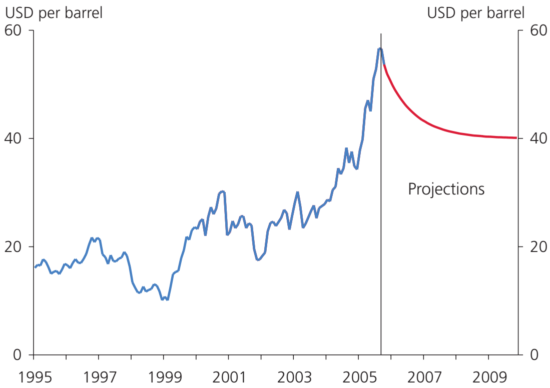
## Increasing volatility and risk aversion

Many of these events have occurred suddenly and without warning. To risk-averse consumers, firms and investors these events have contributed to weaker economic activity via adversely affecting business and consumer confidence. The timing of these events is also important, with their economic impact likely to be more sizeable if the economy is at a vulnerable stage of the cycle. The September 11 attacks in 2001 occurred during a trough of the US business cycle and followed a period of falling business confidence and employment.

Changed perceptions and attitudes to risk have had an impact in financial markets. In 2003 for example, fears of impending economic weakness, possible deflation, and strong safe haven buying pushed down long-term interest rates in some countries. Corporate debt and money market spreads also widened. Increased risk aversion around the time of the September 11 terrorist attacks contributed to safe haven flows into established markets, and to a sell-off of assets in peripheral markets like New Zealand.[16]

Heightened uncertainty may have contributed to a higher premium on security. In early 2005 it was feared that the lack of a supply cushion could trigger a surge in oil prices if the geopolitical environment or weather conditions took a turn for the worse. This, and strong demand, would have been a factor contributing to the upward shift in oil prices and oil price futures at that time.[17] Although world energy reserves are sufficient to meet demand, analysts believe increased investor risk aversion and past oil price volatility has contributed to lower investment in production or refining capacity.[18]

### Figure 7
### Oil price projections
### *Dubai grade, December 2005* MPS




Source: Bloomberg, RBNZ.

As outlined in our December 2005 ***Monetary Policy Statement***, we have assumed oil prices (Dubai grade) will eventually settle at around USD 40per barrel. This is broadly consistent with a range of estimates of the long-run cost of oil production and reflects an assumption that high oil prices will trigger a relatively quick supply response and moderation in demand. Nevertheless, oil prices are expected to settle at a level that is high in historical terms, as demand conditions remain robust.

## Heightened focus on security/preparedness

Disasters have serious consequences for affected communities, individual households, and the economy as a whole. To minimise the risks of such occurrences increased efforts have been directed at heightening security, contingency planning and crisis management. Border security is of particular importance to New Zealand given our reliance on agricultural exports and tourism.[19] A foot

16 Despite these shocks being fairly recent, financial market measures of volatility and risk aversion are currently around historically low levels.

17 The risk of a 'super-spike' in oil prices to over USD 100 per barrel was raised by some investment banks in early 2005, among them Goldman Sachs. At the time of Hurricane Katrina oil prices did spike above USD 70pb but have since settled back.

18 Alan Greenspan (2005b) notes that much of the world's proven resources are concentrated in politically volatile areas.

19 In the December 2005 Half Year Economic and Fiscal Update an additional NZD 13m was allocated over the forecast period towards the unquantified fiscal risk of preparing for a possible pandemic in New Zealand. see www.treasury.govt.nz/forecasts/hyefu/2005/4intro.asp

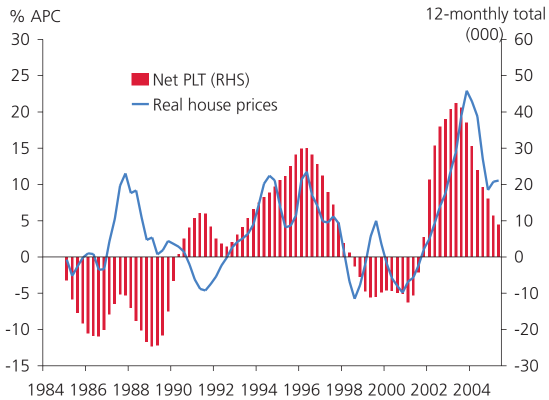
and mouth disease outbreak in New Zealand would have a severe economic impact, for instance.[20]

Investing in strategies to prevent or at least mitigate the impact of disasters makes economic sense. However, preparedness is not without cost. Security measures can be expensive and costly to impose, can disrupt trade, capital and migration flows, and can allocate resources away from more productive uses. Adverse shocks could also result in difficulties in particular sectors, which could raise the vulnerability of the economy to further adverse events. Losses to the insurance industry following the September 2001 attacks affected the capital base of many insurance firms and contributed to reduced coverage and higher insurance premiums. Macroeconomic policymakers need to be prepared to act to maintain economic and financial stability. An OECD study (2002) found that rapid public policy response and international cooperation were crucial factors in the rebuilding of economic confidence following the September 2001 attacks.

### Increase in the New Zealand premium

Many of these events tend to highlight the advantages of living in safe haven destinations such as New Zealand,

Figure 8
Permanent and long-term migration and real house prices
*New Zealand*




Source: Statistics New Zealand, Quotable Value Limited

although there is never room for complacency. It is noticeable that migration flows to New Zealand picked up strongly following the September 11 attacks, whereas migration outflows slowed. The perception of being a safe haven destination may also have attracted more tourists to New Zealand from other destinations and contributed to more domestic tourism. The pick up in Australian visitor arrivals following the Bali bombings is evidence of this.

## Is this a new phenomenon?

Wars, earthquakes, disease outbreaks and natural disasters have occurred throughout history, and there is nothing particularly distinctive about the events in recent years. However, technological advances in communications and globalisation have made the world smaller and more interconnected. More advanced financial markets have provided instruments for managing risk. However, without adequate systems in place, financial markets can themselves be a source of adverse shocks. Greater vigilance and preparedness is needed to prevent worst case outcomes eventuating and to protect New Zealand's reputation as a 'clean and green' producer of agricultural produce and a safe haven destination for tourists. From a financial stability perspective, we also need to ensure that the financial system remains as resilient as possible in the face of a range of international shocks. In recent years the Reserve Bank has put significant effort into ensuring that the financial system is able to withstand a host of external and domestic shocks that might plausibly occur at some stage in the future.[21]

Monetary policy also has a potential role to play in the management of external shocks that might affect New Zealand's economy. How monetary policy would respond to a given event depends on the nature of the shock, its duration and how well we can actually identify its effects. Market commentators sometimes ask what percentage point adjustment we might make to the Official Cash Rate if we were faced with a particular event such as a foot and mouth or pandemic flu outbreak. Given the complexity of

[20] To illustrate of the potential losses from a foot and mouth outbreak in New Zealand, the Reserve Bank and The Treasury published a hypothetical scenario; potential losses under this scenario cumulated to slightly under 10 per cent of GDP after two years. (RBNZ 2003).

[21] The Reserve Bank regularly assesses the soundness and efficiency of the financial system, the details of which are published in the six-monthly *Financial Stability Report*. See www.rbnz.govt.nz/finstab/fsreport/index.html

the economy and the nature of these sorts of shocks, it is simply not possible to be prescriptive in advance. Moreover, monetary policy is not a panacea to every external event that occurs. For example, there is not much monetary policy can do in the face of an adverse change in the relative price of a particular commodity in world markets that may impact on a particular industry in New Zealand. While monetary policy would take into account the effect of that relative price change on activity in New Zealand (and hence on general inflation pressures) it clearly cannot do much to insulate the particular industry from that relative price change.

Our current Policy Targets Agreement requires us to maintain price stability on average over the medium term, but it does give us the flexibility to respond to events if we can make a worthwhile difference. While maintaining price stability over the medium term remains the primary goal of monetary policy, we are able to make policy trade-offs where doing so will avoid unnecessary volatility in the wider economy.

## 5 Conclusion – key lessons

This paper has outlined three key phenomena that have faced global policymakers in the new millennium. The impact of each of these developments has been larger than many of us could really have anticipated. Moreover, the prognosis as to how each plays out over the years ahead is, at best, pretty unclear.

That being the case, what lessons can be distilled both globally and for New Zealand?

The first lesson is that we seem to be facing a period of considerable change in relative prices in the global economy, many of which directly affect New Zealand. Some of the effects on relative prices are temporary, whereas others are likely to prove more enduring. Changes in relative prices inevitably mean changes in the complexion of economic activity across the globe and within individual sectors. Inevitably, there will be some winners and losers in this process, which poses significant short-term challenges for firms, households and policymakers alike as the adjustment to ever-changing economic conditions is rarely a smooth process.

The second lesson is that we currently live in a world of significant global imbalances. High savings countries are funding low savings countries, particularly those whose residents are participating in the housing cycle. At some point, there is likely to be an adjustment to those global imbalances. Exactly how this plays out is also unclear, although history tells us it is likely to involve a realignment of exchange rates and interest rates as well as changes in household and business spending patterns. History also tells us that the process may not necessarily occur smoothly for all countries. This highlights the desirability of having a robust financial architecture – resilient financial institutions, payment systems and the like.

The third lesson is that much of the world has enjoyed higher growth, lower volatility and low inflation; but policymakers across the globe need to remain vigilant. It is commonly asserted that the integration of emerging economies has contributed to a more benign inflationary environment, which has made life easier for macroeconomic policymakers in OECD economies. However, the policy challenges posed by higher prices for oil and other commodities as well as issues arising from housing market developments and threats to security have become more apparent. As our knowledge of the influences driving these changes is limited it is difficult to precisely know how persistent many of these changes will be and how they will shape the global economy in the coming years. As such, policymakers around the world will need to continue to closely monitor these developments.

New Zealand has been growing strongly over the last decade driven by improved efficiency, high participation and stronger terms of trade. Ultimately our future performance will depend on our ongoing relative competitiveness. The big global changes that we have described have the potential to impact that in a significant way.

In a global sense, labour has become more internationally traded, capital is more available, and the production and distribution of manufactured goods cheaper. In New Zealand (like most OECD countries) we have known for some time we cannot compete across a range of general manufactures with the big low-cost producers. The trend has been good news for our household and business consumers who have enjoyed very competitive import prices and tighter mark-ups. In contrast, the price of resources has increased. For some of our imported needs, particularly oil, that has been bad news for us. But on balance we have had good news: strong commodity prices for much of our primary sector, and a significant improvement in our terms of trade.

The price of global security has also increased. We are by no means immune to personal and environmental risks in New Zealand, but on balance our isolation and vigilance to bio-hazards has largely protected us from these, enhancing our competitive position in food production, tourism and education.

Finally, there has been a big adjustment to OECD balance sheets from the housing boom. Because in New Zealand there are relatively high holdings of housing assets, we have so far maintained or enhanced our relative wealth position. But this phenomenon also carries significant risks: we are highly leveraged within a world of growing imbalances. We have put considerable effort into ensuring our financial system remains robust in the face of shocks. But New Zealand has a challenge ahead as it learns to reduce household debt and work down its deficit with the rest of the world.

In this article we have noted some big global changes are afoot. They are hard to assess in the short-term, but are probably bigger than most of us have seen in our working lives. There is some good news for New Zealand's international position in the medium-term, but some big policy challenges to adjust to in the short-term. For business and households, acumen and agility will be rewarded as the world changes around us.

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