

Manufacturing decline not just a dollar story

*A speech delivered to the New Zealand Manufacturers and Exporters
Association in Auckland*

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By Graeme Wheeler, Governor

Thank you for the invitation to address you. If it's helpful, I'll comment on global and domestic trends in manufacturing, and then focus on some of the fixes commentators propose to address our high exchange rate.

i. Global and domestic trends in manufacturing

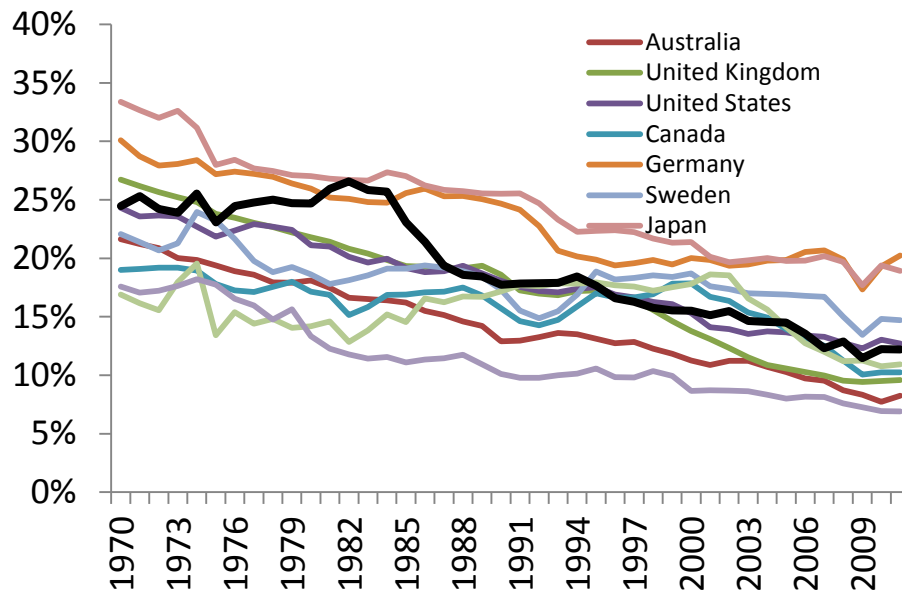
In 1953, the President of General Motors, Charles Wilson, told a US senate committee:

“I thought what was good for the country was good for General Motors and vice versa.”

He could not have imagined that 56 years later the US government would have a 60 percent ownership stake in the company, and two years later General Motors would be selling more vehicles in China than in the United States.

Manufacturing fuelled economic growth in the advanced countries during much of the 19th and 20th centuries. But since the 1950s, and especially over the past four decades, the relative importance of manufacturing has been declining. Its share of global GDP fell from 27 percent in 1970 to 16 percent in 2010, and only increased in the poorest countries. Manufacturing's share of total employment in the United States – the world's largest manufacturing economy - declined from 26 percent in 1970 to nine percent in 2008. And, across the advanced economies, manufacturing employment totalled 62 million in 2000, a decade later it had fallen to 45 million.

Several factors account for this decline including international sourcing accompanying the global transfer of capital, investment, and skill enhancing technologies. Competition from developing economies with industrial strategies based on exporting low cost manufacturing products is also an important factor, and the falling relative price of manufactured goods and rising per capita incomes stimulated rapid growth in services. Just as manufacturing displaced agriculture in relative significance, the global economy is becoming increasingly service intensive.

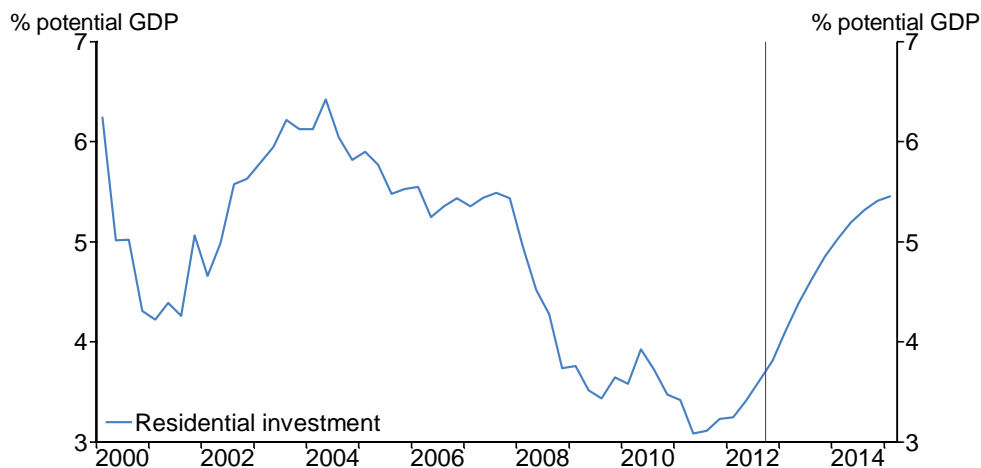
Chart 1: Share of manufacturing in GDP (1970-2011)

This trend of relative decline has been common despite differences in economic structures, size and geography, commodity endowments, and exchange rate arrangements and behaviour. For example, since 2000 the real effective exchange rate of the United States has depreciated by 14 percent and manufacturing employment fell by 31 percent. There are also positive signs. Some reversal of the offshoring process appears to be underway in some high income countries due to increased specialisation in higher-skill activities based around digitisation, and advanced robotics and information technologies.

New Zealand is experiencing similar structural and global pressures in its manufacturing sector. Manufacturing's share of GDP has trended down from 25 percent in the early 1980s to around 12 percent currently.

Chart 2: NZ manufacturing as a share of GDP

This decline is not simply an exchange rate story. The global forces behind the declining relative share of manufacturing in advanced countries are also having a powerful impact in New Zealand. In addition, our manufacturing sector was hit hard by the 2008/09 recession, in spite of a 15 percent decline in our real effective exchange rate. Manufacturing value added is 11 percent higher than the 2009 trough but remains 9 percent below its 2007 level. The weakness has been concentrated among producers supplying the domestic market. A factor behind this was the rapid decline in residential investment after 2007- equivalent to two-and-a-half percent of GDP.

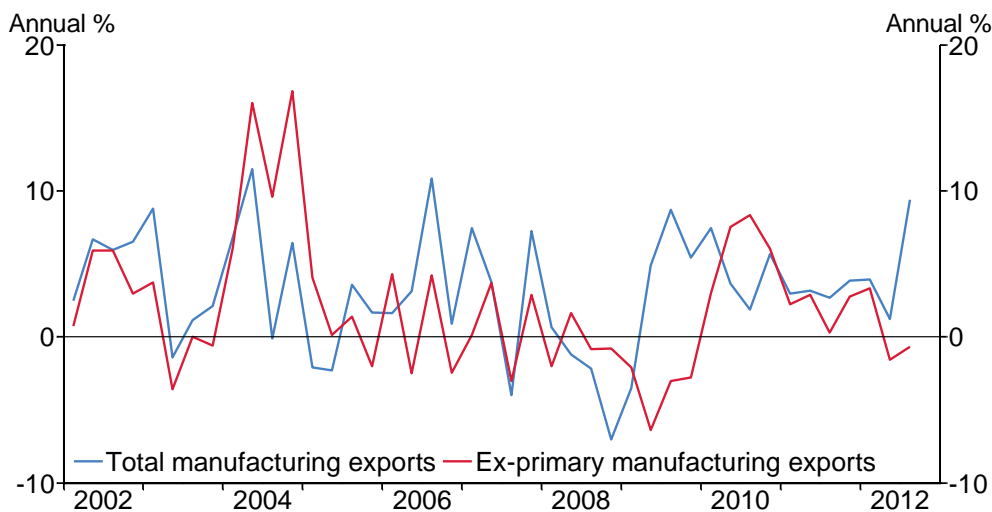
Chart 3: Residential investment as a share of potential GDP

The link between construction activity and manufacturing is especially important - a one percent expansion in construction requires almost a 0.4 percent expansion in

manufacturing output. This is why the projected \$30 billion of construction activity in the Canterbury region should substantially boost manufacturing turnover.

Despite the appreciation in our exchange rate, manufactured exports are above pre-recession levels and have increased at an annual rate of 2.3 percent since 2008 – or by 1.1 percent excluding food processing. The strength of the Australian and East Asian economies has been important – with Australia accounting for 35 percent of our manufacturing exports.

Chart 4: Growth in manufacturing exports



ii. New Zealand's exchange rate

Considerable attention is focussed on the high level of our exchange rate so it's important to discuss the suggestions made by commentators to address it. Estimates of the degree of over-valuation vary, depending on a range of assumptions. In mid-2012 the IMF suggested the currency was over-valued by 10-20 percent and the OECD also considers the exchange rate over-valued. We believe the exchange rate is significantly over-valued relative to what would be sustainable long term in the absence of sizeable increases in the terms of trade and productivity.

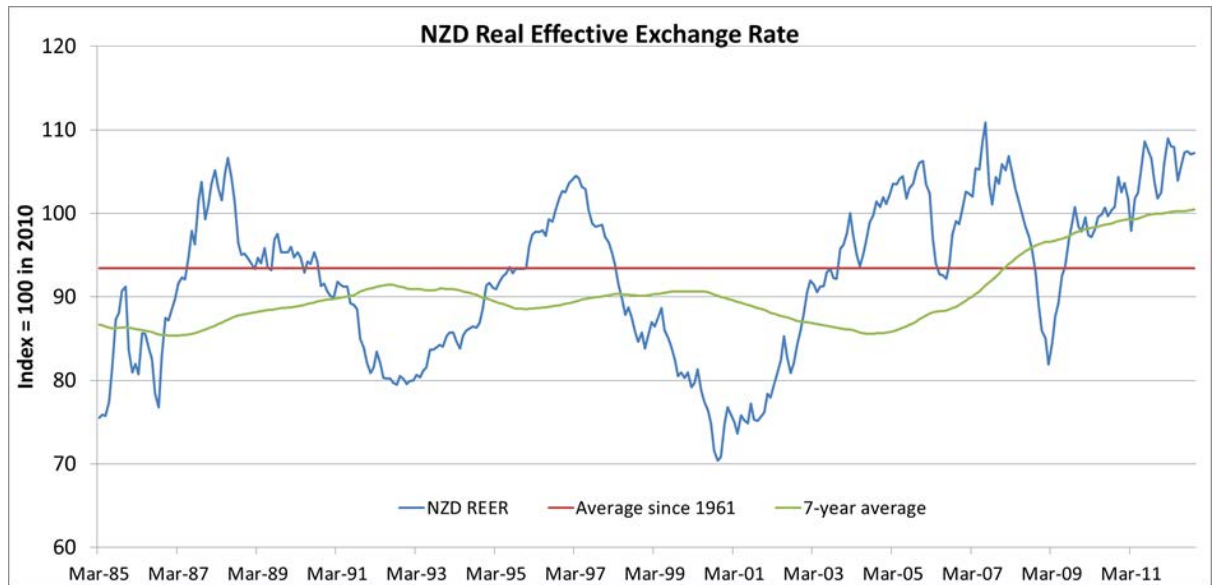
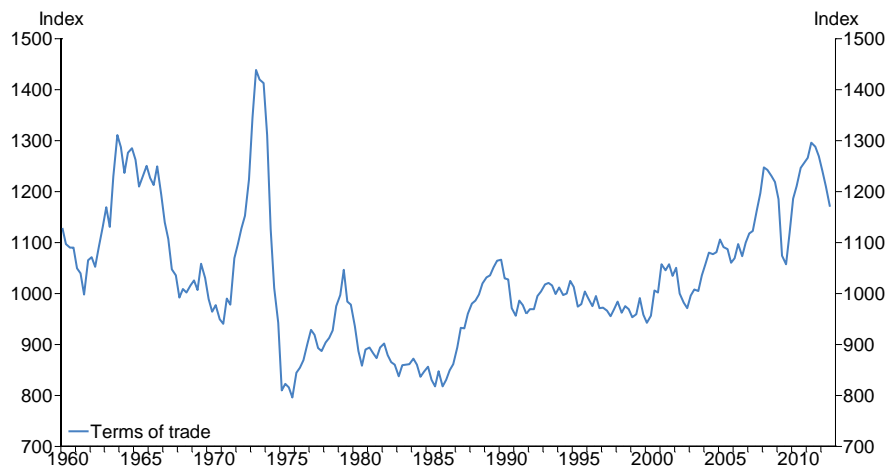
Chart 5: New Zealand's real effective exchange rate

Chart 5, produced by the Bank of International Settlements, shows movements in New Zealand's real effective exchange rate since 1985. The real effective exchange rate provides a more accurate picture of competitiveness than the nominal effective exchange rate as it corrects for differences in relative inflation rates (or relative unit labour cost movements) between New Zealand and its major trading partners.

Some appreciation in our real exchange rate over the last decade can be explained as our terms of trade (or the ratio of export prices to import prices) remain 20 percent higher than the average for the 1990s. This, in part, reflects the rapid growth of the East Asian economies, and especially China, and the rising global demand for protein. On the other hand, it seems that the real exchange rate hasn't reflected New Zealand's declining productivity differentials.

Chart 6: New Zealand's terms of trade

Terms of trade aside, our currency is over-valued in terms of economic fundamentals and the Reserve Bank would like to see a lower exchange rate.

Some of the strength in our real exchange rate is due to global financial imbalances and the weakness of the US dollar in particular. Our real exchange rate lies above its 90th percentile (based on historical data) relative to the US dollar, Euro, and Sterling, but tracks below average against the Australian dollar.

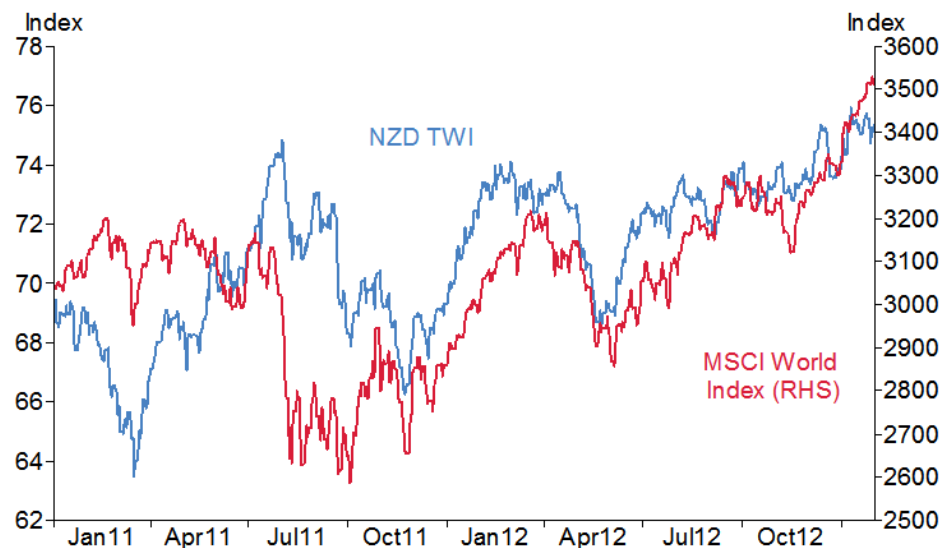
The weakness of these currencies is due to the financial and economic aftermath of the global financial crisis. The origins of the global financial crisis lay in the large global payment imbalances, the excessively expansionary monetary policies of the United States, and a financial system that was under-capitalised, under-regulated, over-confident, complexly interconnected, and implicitly guaranteed by governments. The crisis led to a revaluation of every asset across the globe and massive portfolio adjustments in the balance sheets of households, corporates, banks, and governments.

In the aftermath of these portfolio adjustments, central banks in countries representing two thirds of world output now have official interest rates of between zero and one percent, and various types of quantitative easing have added US\$5 trillion of assets to central bank balance sheets since 2009. These policies are aimed at stimulating growth but also have significant spillover effects on economies around the world. This has pushed down the quantitative easing currencies and pushed up currencies like the NZ dollar.

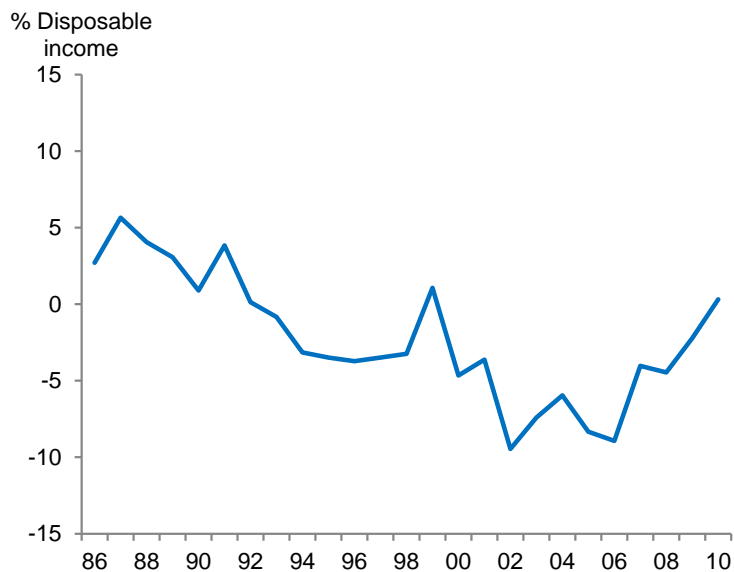
New Zealand isn't alone in experiencing unwelcome exchange rate pressures. Australia, Canada, Sweden, Norway, and some Asian and Latin American countries are experiencing appreciating exchange rates as investors seek higher yields in countries with stronger growth rates, favourable commodity price outlooks, sound macroeconomic policies, and higher interest rates.

Over the longer run, movements in our exchange rate are strongly correlated with measures of the terms of trade. But, more recently, with recent additional bouts of quantitative easing by the Federal Reserve, fluctuations in investor risk appetite have been a key influence. Consequently, a close relationship currently exists between the NZ dollar and international risk assets such as US equities.

Chart 7: Movements in NZ's exchange rate and US equity prices



Abstracting from the recent impact of quantitative easing, the major domestic factors behind New Zealand's high exchange rate over many years are our low level of savings (relative to our business and residential investment desires), our desire for high levels of consumption, and our dependence on foreign savings to achieve this. I discussed this in a recent presentation to the Canterbury Employers' Chamber of Commerce. Our net national savings rate over the past 30 years has averaged three percent of GDP – almost five percentage points below the OECD median. Our net household savings as a percentage of household disposable income averaged minus two-and-a-quarter percent over the past 25 years – this is the lowest rate in the OECD (where data are available) and 10 percentage points below the OECD median.

Chart 8: Net household savings

Our current account deficits over the same period have averaged five percent of GDP, and our foreign debt levels relative to GDP are little different from some of the smaller countries at the heart of the Euro crisis. This poor savings performance comes at a cost. It increases the vulnerability of our economy and it means that higher interest rates than elsewhere are necessary to achieve similar inflation outcomes. The higher interest rates result in upwards pressure on the exchange rate.

iii. Policy responses to an over-valued exchange rate

Commentators suggest a range of policy responses including lowering interest rates, introducing quantitative easing, undertaking large scale intervention, capping the exchange rate like Switzerland, and targeting output and unemployment instead of, or in addition to, inflation.

Let's examine these.

a) Lowering interest rates

Changes in the Official Cash Rate (OCR) can affect inflation pressures by influencing the demand for interest sensitive forms of spending, changing returns on financial and real assets, and affecting the exchange rate.

Our objective under the Policy Targets Agreement is to achieve annual inflation near the two percent target mid-point of the one percent to three percent range. In doing so our focus is on potential inflation pressures over the next 12-24 months. In considering inflation pressures we closely examine current and forecast movements in demand, output, and employment and the outlook for competitiveness. We seek to avoid excessive volatility in output growth, interest rates, and the exchange rate. We also want to avoid rushing into decisions that might need to be quickly reversed and in doing so create uncertainty as to the Reserve Bank's objectives.

Our forecast in the December 2012 Monetary Policy Statement was for growth to improve over the next 12 months, with inflation pressures slowly increasing. Our December interest rate track was for the OCR to remain unchanged throughout 2013 at its current 50-year low. While this is our current central projection, actual outturns may differ, depending on developments in the domestic and international economy, and in the exchange rate. All other things equal, a higher exchange rate relative to expectations will lead to a lower than expected OCR.

Having said this, the relationship between the OCR and the exchange rate isn't a simple one. Lower interest rates can reduce pressure on the exchange rate but analysis of past OCR cuts in New Zealand shows a relatively weak statistical relationship. This can vary through time but, in general, movements in the exchange rate will reflect returns in the broader economy rather than simply returns in the money market.

Any adjustment to the OCR needs to be credible to the market. Lowering the OCR in a one-off manner that's inconsistent with the Policy Targets Agreement could lead to expectations of a subsequent reversal. On the other hand, lowering the OCR on a sustained basis in a manner inconsistent with the PTA would result in higher inflation and a weaker exchange rate. Eventually inflation would increase costs and erode competitiveness, and lead to expectations of higher inflation. Output growth would slow as people switch from productive activity to inflation hedging behaviour. Sacrifices to future growth would eventually be needed to cure the inflation problem.

Since late 2010 the Reserve Bank of Australia has cut its official cash rate by one and three-quarter percent to its current level of three percent without significant impact on the Australian dollar. The yen appreciated by over 30 percent between February 2007 and November 2012, a period where the target rate was lowered from 0.5 to a range of 0.1 to zero percent. The Swiss franc appreciated by about 20 percent between January 2010

and July 2011, despite the central bank's target interest rate range between zero and 0.75 percent. Since cutting the target rate to 0-0.25 percent and introducing a floor rate of 1.2 Swiss francs per Euro, the Swiss franc has been broadly stable at slightly above that level.

b) Exchange rate intervention

Foreign currency intervention is unlikely to have a sustained impact in lowering the exchange rate but it can reduce pressures in the short term if the Reserve Bank makes the right calls about changes in market sentiment and the strength of capital flows.

We have a four point criteria in assessing whether to intervene in the exchange market. These are whether the exchange rate is at an exceptional level, whether its level is justified, whether intervention would be consistent with monetary policy, and whether market conditions exist to successfully achieve the desired exchange rate adjustment.

The last factor is particularly important. Globally, exchange rate turnover is in the range of US\$4 trillion to 5 trillion a day. BIS surveys suggest that the Kiwi is about the tenth most traded currency in the world with daily turnover of spot and forward transactions totalling around US\$27 billion in April 2010 (the latest BIS survey).

The Reserve Bank is prepared to intervene to influence the Kiwi. But given the strength of recent capital flows, we can only attempt to smooth the peaks of the USD/NZD exchange rate; we cannot determine the level. When the NZ dollar is coming under upward pressure, we want investors to know that the Kiwi is not a one way bet.

c) Quantitative easing or printing money

Quantitative easing has been adopted by central banks that lowered interest rates almost to zero yet still faced massive household and corporate deleveraging in the economy, and fragile balance sheets in the financial sector requiring considerable recapitalising.

Quantitative easing aims to stimulate wealth effects in the economy by increasing liquid balances and generating higher prices for equities and financial and real assets. It's also designed to raise bank profitability as a means of strengthening banks' capital positions. And it was hoped that higher bank capital, through retained income and capital

injections, would lead to additional bank lending to corporates, and especially credit constrained small and medium sized enterprises and households – at a time when many were reducing their leverage. The intention was to encourage borrowing and investment by entrepreneurs, businesses and individuals, not financial intermediaries. On this, the evidence has been flimsy at best.

These economies were severely damaged by the global financial crisis. Median real household wealth in the US for example fell 39 percent between 2008 and 2010, the unemployment rate in the Euro area deteriorated by over four percent over the past four years to reach 11.7 percent - and over 14 percent if Germany is excluded. And Japan's consumer price index is currently below its 1993 level.

New Zealand did not experience this type of economic damage and quantitative easing, together with its precursor of very low interest rates, is not justified in the New Zealand situation. Our economic challenges are different from the US, Euro area, and Japan, and quantitative easing would increase inflation, raise inflation expectations, stimulate asset prices, and lead eventually to higher interest rates.

d) Cap the exchange rate like Switzerland

Some point to the success of the Swiss National Bank in capping the Swiss franc at a rate of 1.2 Swiss francs to the Euro. But, this would be a particularly risky strategy for New Zealand. In 2010, the Swiss National Bank reported losses totalling 27 billion Swiss francs (roughly NZ \$35 billion at today's exchange rate) from its unsuccessful attempt to intervene at 1.5 Swiss francs to the Euro.

In September 2011, the Swiss National Bank committed to purchase foreign exchange in unlimited quantities in order to hold the exchange rate at 1.2 Swiss francs to the Euro (in other words, to keep the Swiss franc from appreciating further than that). As a result, Switzerland's foreign exchange reserves increased from US\$45 billion before the global financial crisis to US\$540 billion today – the fourth highest in the world. The size of the Swiss National Bank's balance sheet expanded from 25 percent of GDP to around 85 percent of GDP.

If New Zealand decided to cap the NZ dollar, depending on where the cap is enforced, similar levels of intervention might be required as global foreign exchange turnover in NZ dollars relative to GDP is similar to that in Swiss francs. The OCR would need to drop to

zero first in order to eliminate the interest arbitrage motivation for NZ dollar inflows. Any attempt to retain non-zero interest rates by “sterilising” such massive intervention would be very difficult. In effect therefore, a Swiss type operation to cap the value of the NZ dollar through large scale FX intervention would also amount to quantitative easing. As I mentioned, this would be highly inflationary in the NZ context.

e) Targeting growth and unemployment

Flexible inflation targeting requires the Reserve Bank to consider the time path for returning to the inflation target. In doing so, we closely examine a range of real indicators such as the time path of demand and output, the level of surplus capacity relative to potential output, the state of the labour market, and competitiveness indicators. We also review inflation indicators in the tradable and non-tradable sectors, and in a range of asset markets. We alter the OCR track if new information suggests that our central view of the economic outlook requires modification.

Some commentators suggest that the Reserve Bank should set a specific unemployment objective like the Federal Reserve. However, the Fed adopted this as part of its market guidance rather than an objective per se. It remains conditional on keeping inflation and inflation expectations in check. In other words the continuation of the Fed’s zero interest rate policy remains heavily dependent on inflation expectations not deviating too far from their inflation goal.

The Reserve Bank’s Policy Targets Agreement appropriately requires the Bank to look at activity as well as inflation and seeks to avoid unnecessary instability in output. We endeavour to do this in the short run. However, monetary policy has an enduring impact only on inflation and expectations around future inflation. While monetary policy affects the time path of inflation it doesn’t affect the long term rate of growth of output. Trend rates of growth depend largely on the quantity and quality of human capital and the amount and productivity of the capital that labour has to work with.

f) How can exchange rate pressure best be alleviated?

Expectations of what central banks can deliver by way of exchange rates and output and unemployment remain excessively high. This is particularly the case in small open economies.

In many countries, monetary policy is asked to operate with high fiscal deficits, or with rigidities in the economy flowing from poorly designed regulation or the absence of structural reforms that could correct imbalances in the economy, raise its growth potential and also support the operation of monetary policy. Instead, there's often a tendency to avoid focusing on important reforms and then criticising monetary policy for not addressing challenges that lie beyond its capability. In New Zealand, the size of the fiscal deficit doesn't help but fortunately fiscal consolidation is progressing steadily.

New Zealand's competitiveness problem is closely linked to its disappointing labour productivity performance and its persistent current account deficits. Since 1990, our labour productivity has grown at an annual rate of one percent, almost two percentage points below the seven largest OECD economies. Our current account deficit over the past 40 years has averaged five percent of GDP and our external debt to GDP ratio is one of the highest in the OECD.

We've much to do in continuing to build our global linkages and addressing government spending and regulatory issues that diminish productivity and competitiveness. It's important that the Government continue to reduce its own dissaving and return to budget surplus. We should also re-examine the factors, including tax and regulation, that diminish and distort the incentives to save and invest.

The New Zealand economy currently faces an overvalued exchange rate and overheating house prices in parts of the country, especially Auckland. The Reserve Bank will be consulting with the financial sector next month on macro-prudential instruments. These instruments are designed to make the financial system more resilient and to reduce systemic risk by constraining excesses in the financial cycle. They can help to reduce volatile credit cycles and asset bubbles, including overheating housing markets, and support the stance of monetary policy, which could be helpful in alleviating pressure on the exchange rate at the margin.

Concluding comments

Globalisation, outsourcing, and international supply chains, along with competition from low cost producers and rising global demand for services, mean that the relative importance of manufacturing has been declining in all but the poorest countries for the past 40 years. New Zealand is no exception. Although the exchange rate is an important headwind for some manufacturers, the overall relative decline in our

manufacturing sector is much more than a simple exchange rate story. Looking ahead, total manufacturing output is expected to increase significantly as a result of the NZD\$30 billion Canterbury reconstruction.

There are no simple solutions available to the Reserve Bank on the exchange rate challenges we face. The causes of the over-valuation partly lie in the spillover effects of policies in countries most severely hit by the global financial crisis. The Bank will intervene when circumstances are right. We will use the OCR as circumstances require and we're exploring the scope to use macro-prudential instruments that address increasing challenges to financial stability associated with ongoing increases in house prices, and that can also support monetary policy. But further efforts to improve the level and productivity of capital that labour works with, to reinforce ongoing fiscal adjustment, to re-examine the factors that diminish and distort the incentives to save and invest, and to reduce dependence on the savings of others, have to be a major part of the solution.